

# AV RECEIVER RX-V671/HTR-6064/ RX-A710 SERVICE MANUAL

**Note:** When the DIGITAL P.C.B. or IC83 on DIGITAL P.C.B. is replaced, the network function of this unit will not operate properly without additional setting.

In such a case, report the serial number of this unit to the following e-mail address.

Yamaha Corporation will reply providing the setting procedure to make the network function of this unit operate properly.

**E-mail:** [ycav-ysiss@gmx.yamaha.com](mailto:ycav-ysiss@gmx.yamaha.com)

## IMPORTANT NOTICE

This manual has been provided for the use of authorized YAMAHA Retailers and their service personnel

It has been assumed that basic service procedures inherent to the industry, and more specifically YAMAHA Products, are already known and understood by the users, and have therefore not been restated

**WARNING:** Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components, and failure of the product to perform as specified. For these reasons, we advise all YAMAHA product owners that any service required should be performed by an authorized YAMAHA Retailer or the appointed service representative

**IMPORTANT:** The presentation or sale of this manual to any individual or firm does not constitute authorization, certification or recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of YAMAHA are continually striving to improve YAMAHA products. Modifications are, therefore, inevitable and specifications are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division

**WARNING:** Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss)

**IMPORTANT:** Turn the unit OFF during disassembly and part replacement. Recheck all work before you apply power to the unit

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This Service Manual uses recycled paper.

## ■ TO SERVICE PERSONNEL

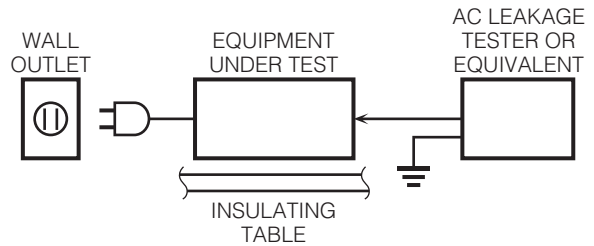
### 1. Critical Components Information

Components having special characteristics are marked  $\Delta$  and must be replaced with parts having specifications equal to those originally installed.

### 2. Leakage Current Measurement (For 120V Models Only)

When service has been completed, it is imperative to verify that all exposed conductive surfaces are properly insulated from supply circuits.

- Meter impedance should be equivalent to 1500 ohms shunted by 0.15  $\mu$ F.



- Leakage current must not exceed 0.5mA.
- Be sure to test for leakage with the AC plug in both polarities.



#### For U model “CAUTION”

“F3702: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 8A, 125V FUSE.”

#### For C model CAUTION

F3702: REPLACE WITH SAME TYPE 8A, 125V FUSE.

#### ATTENTION

F3702: UTILISER UN FUSIBLE DE RECHANGE DE MÊME TYPE DE 8A, 125V.

## WARNING: CHEMICAL CONTENT NOTICE!

This product contains chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.

DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHATSOEVER!

Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

## About lead free solder

All of the P.C.B.s installed in this unit and solder joints are soldered using the lead free solder.

Among some types of lead free solder currently available, it is recommended to use one of the following types for the repair work.

- Sn + Ag + Cu (tin + silver + copper)
- Sn + Cu (tin + copper)
- Sn + Zn + Bi (tin + zinc + bismuth)

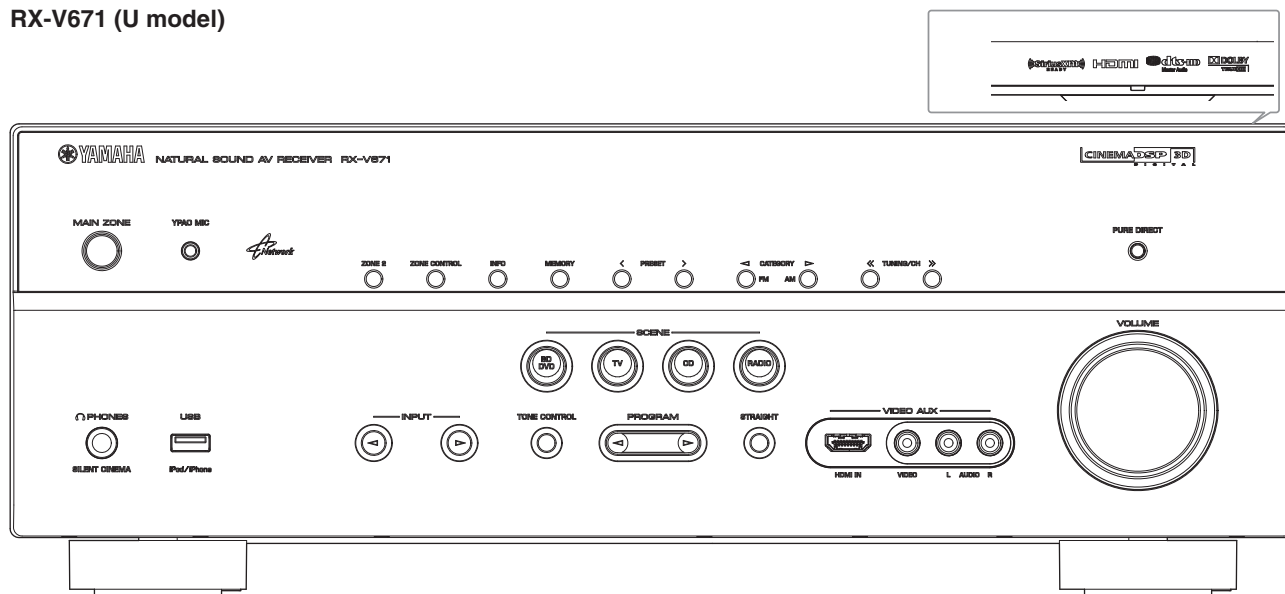
### Caution:

As the melting point temperature of the lead free solder is about 30°C to 40°C (50°F to 70°F) higher than that of the lead solder, be sure to use a soldering iron suitable to each solder.

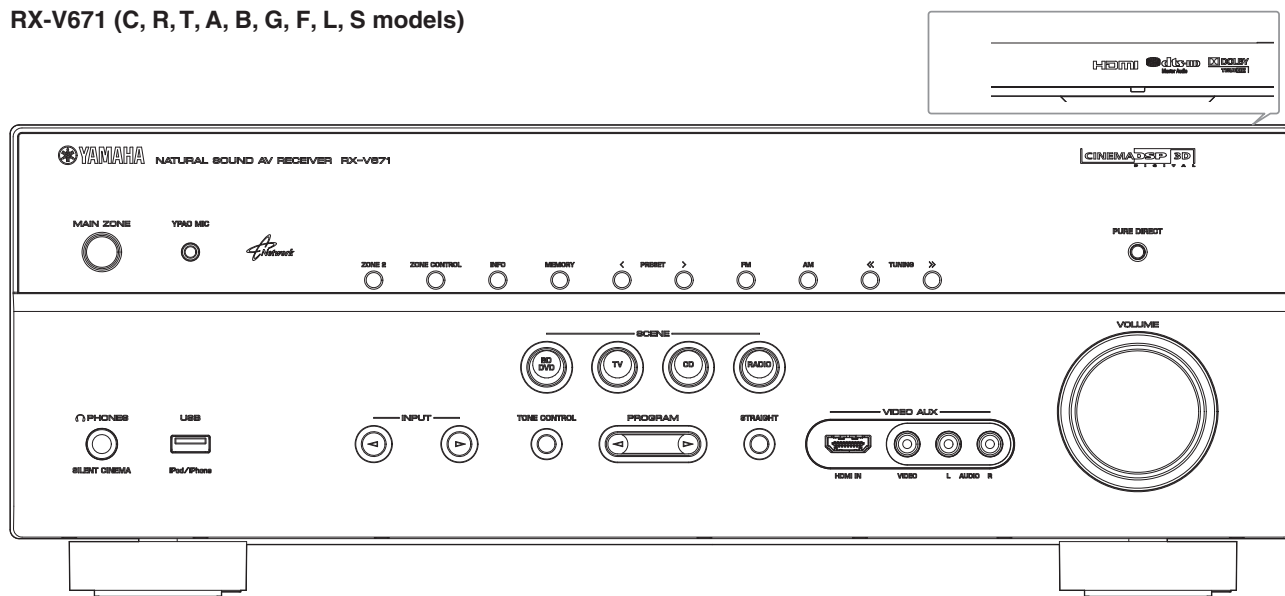


## FRONT PANELS

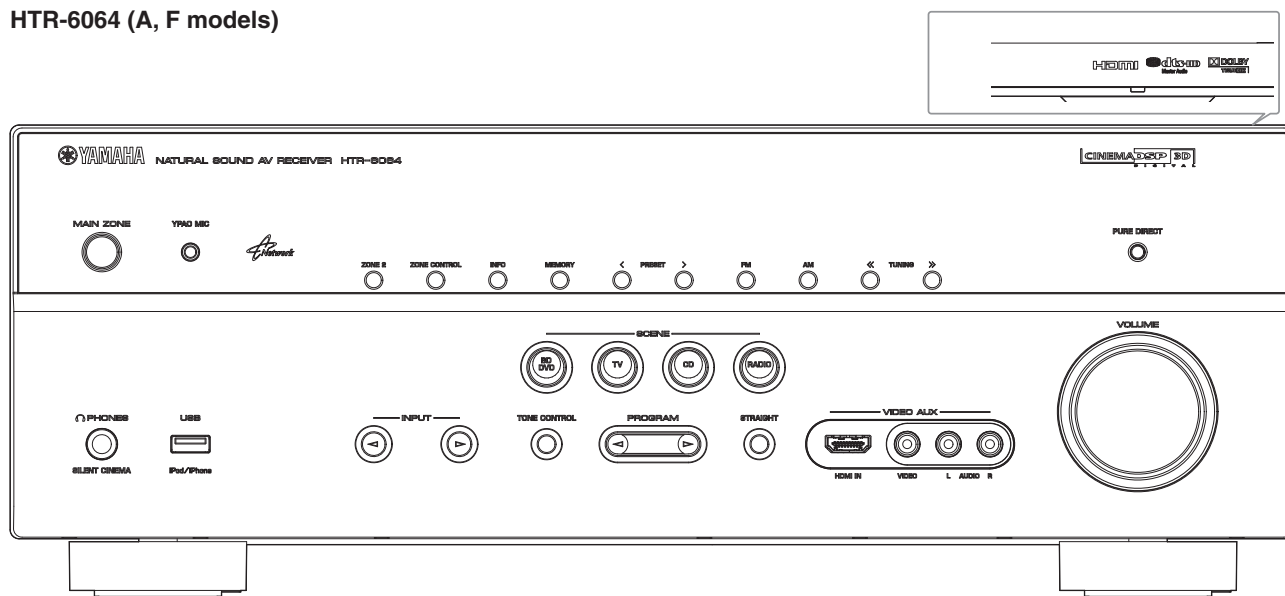
### RX-V671 (U model)



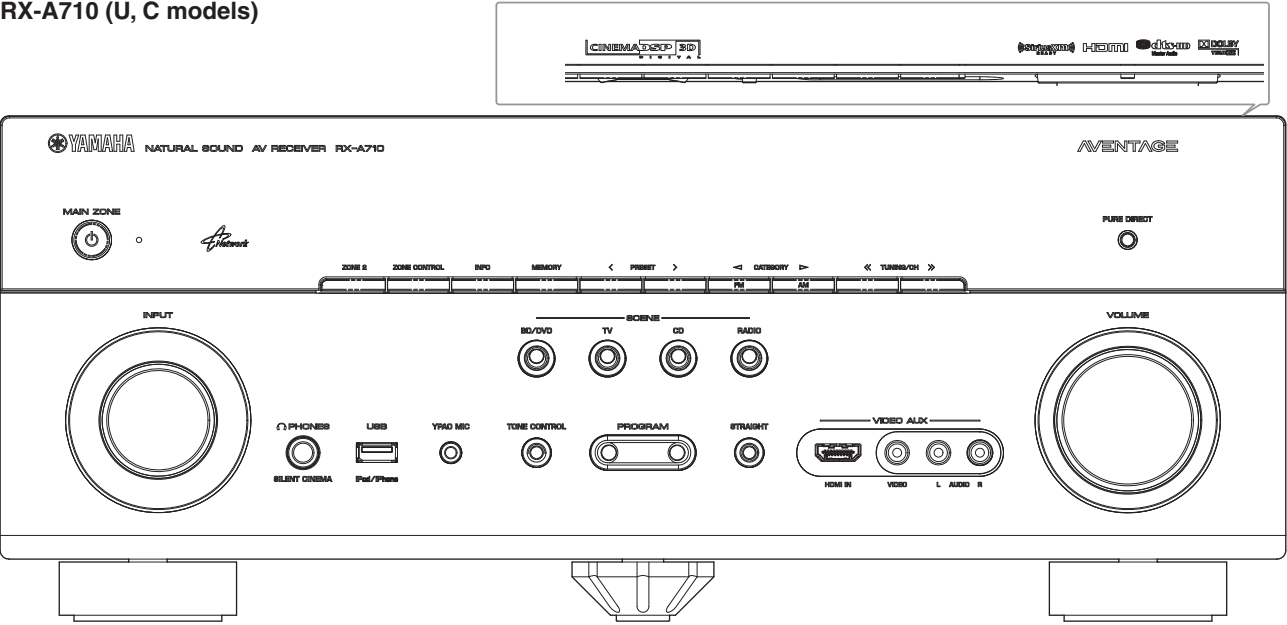
### RX-V671 (C, R, T, A, B, G, F, L, S models)



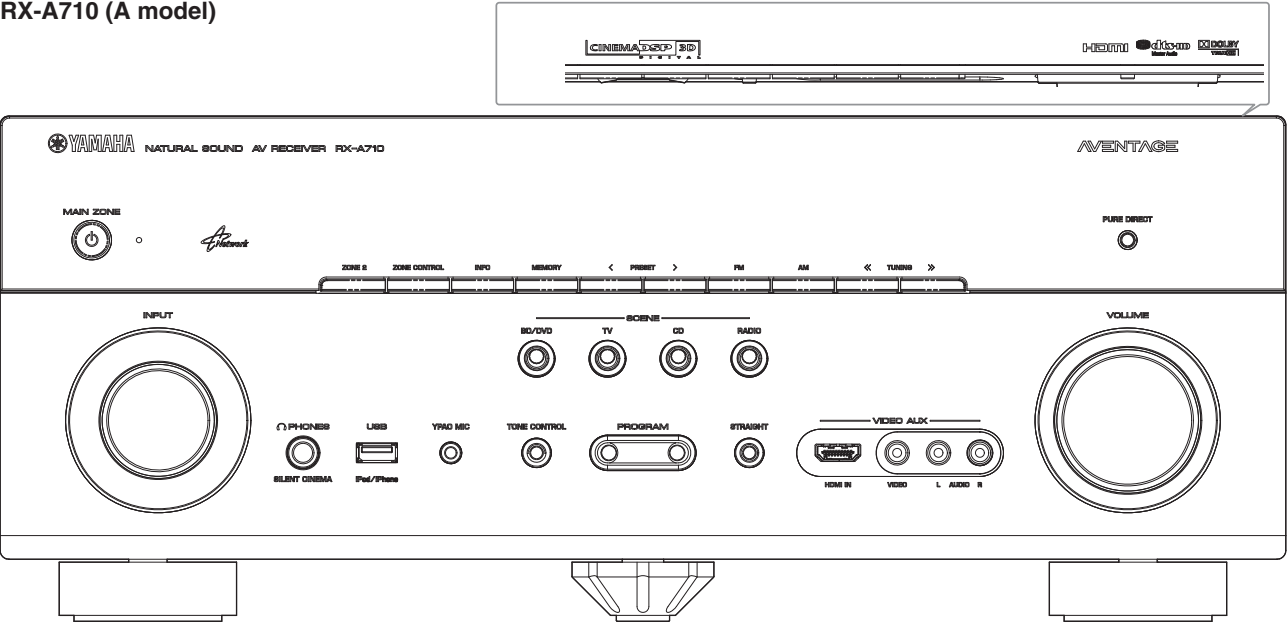
### HTR-6064 (A, F models)



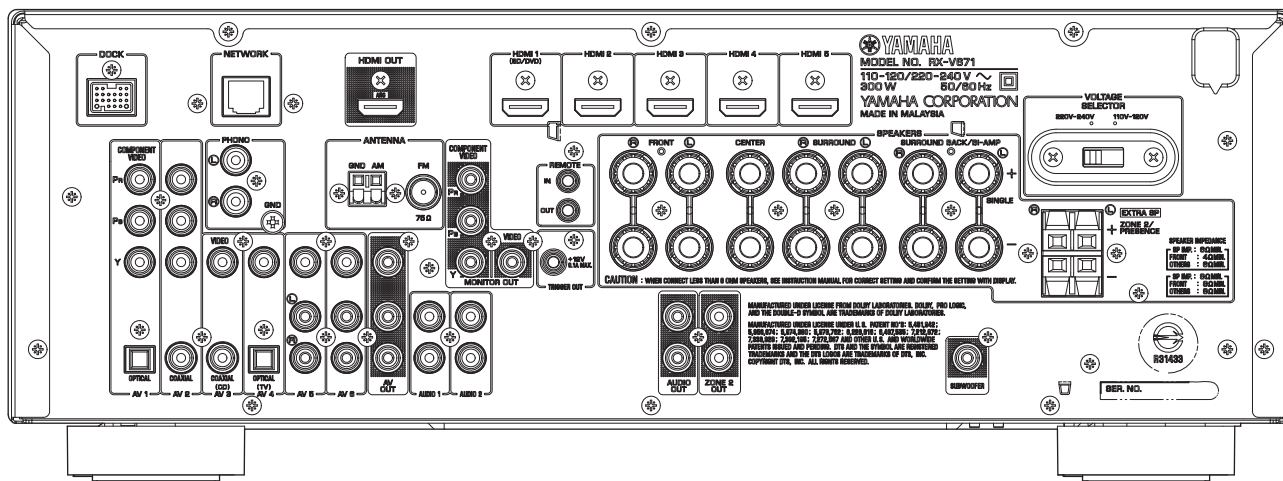
RX-A710 (U, C models)



RX-A710 (A model)



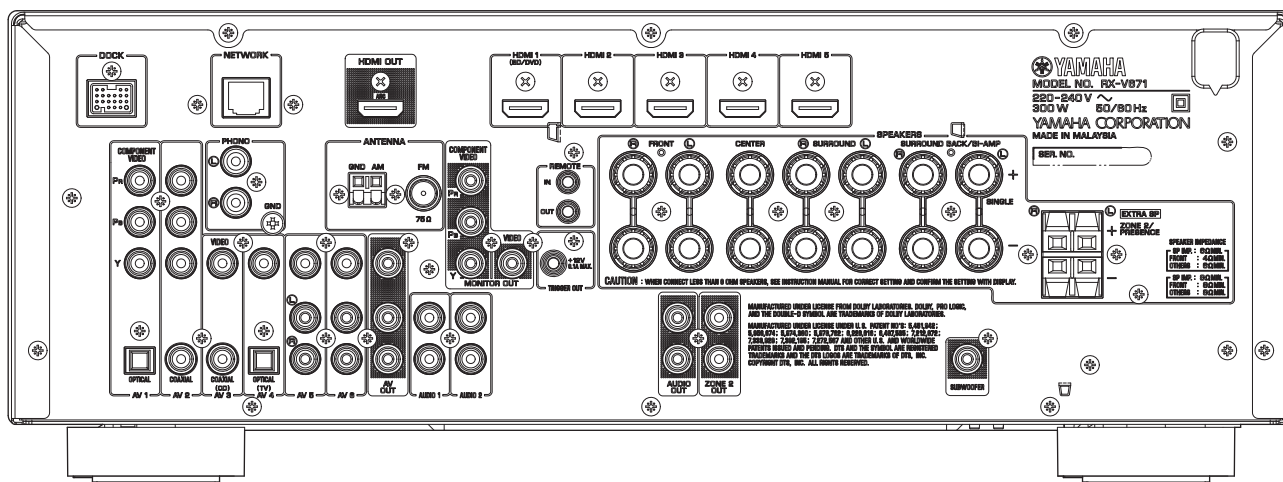
## RX-V671 (U model)



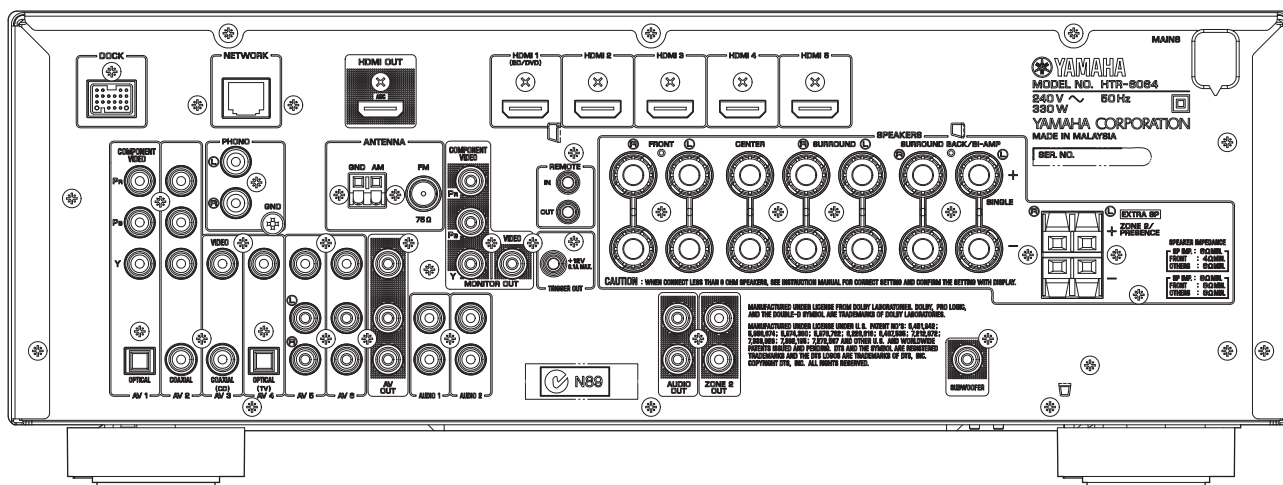
[illegible][illegible][illegible]



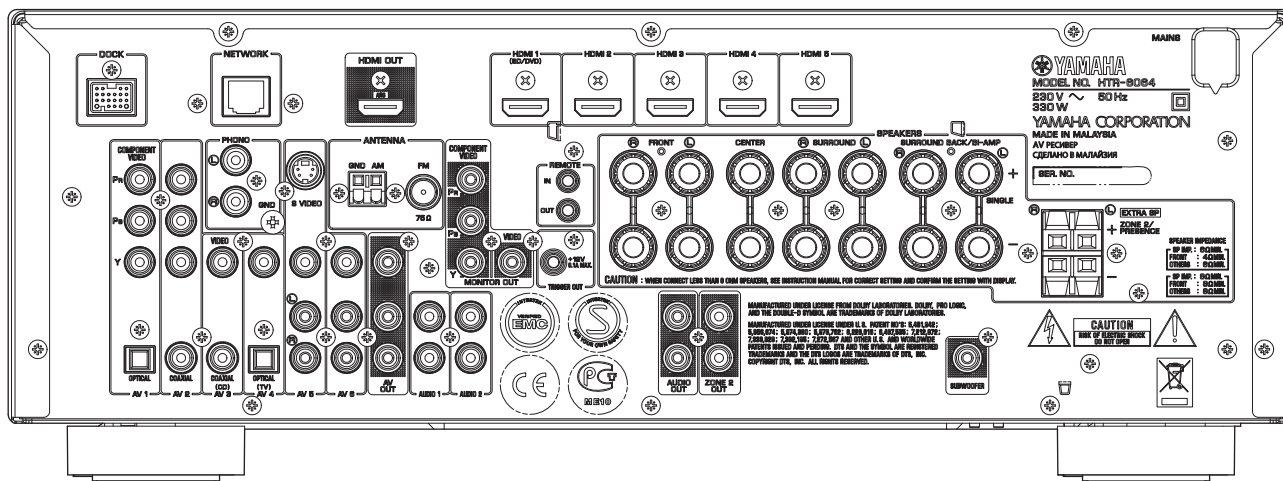
## RX-V671 (L model)



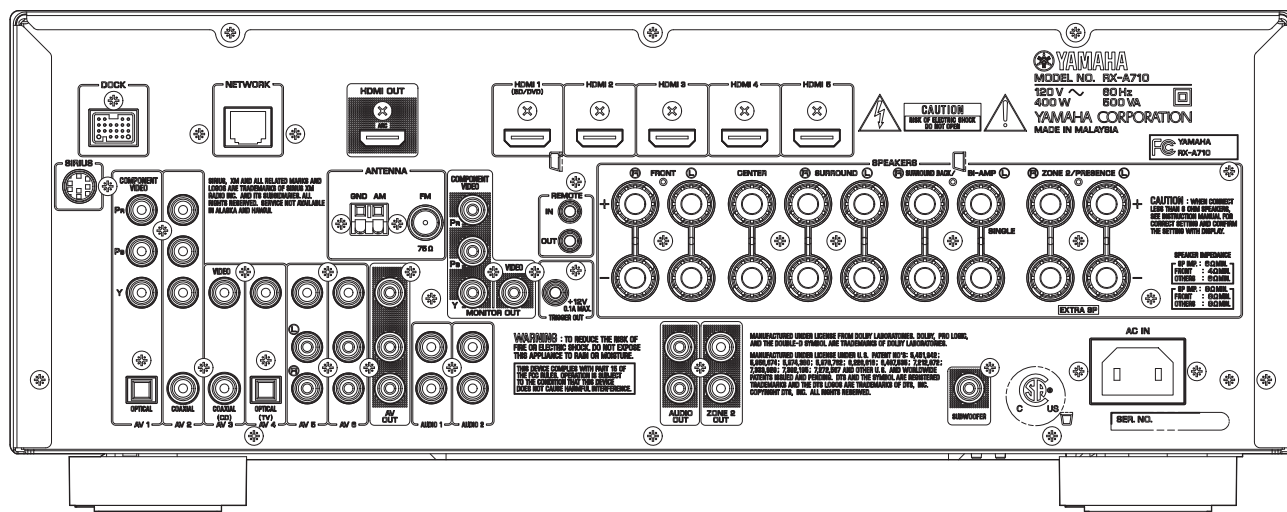
## HTR-6064 (A model)



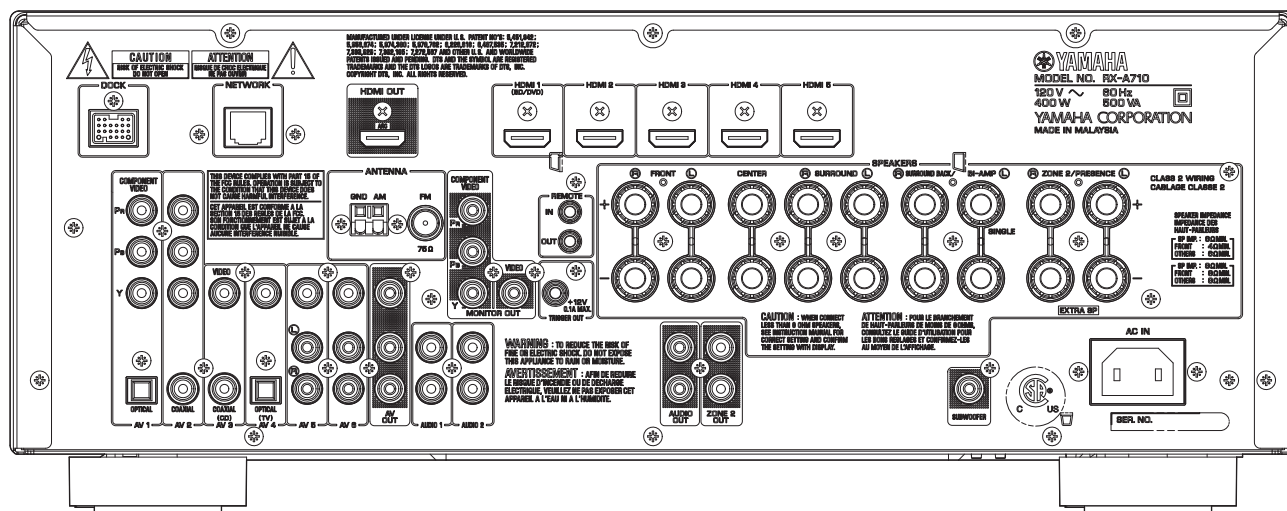
## HTR-6064 (B, G, F models)



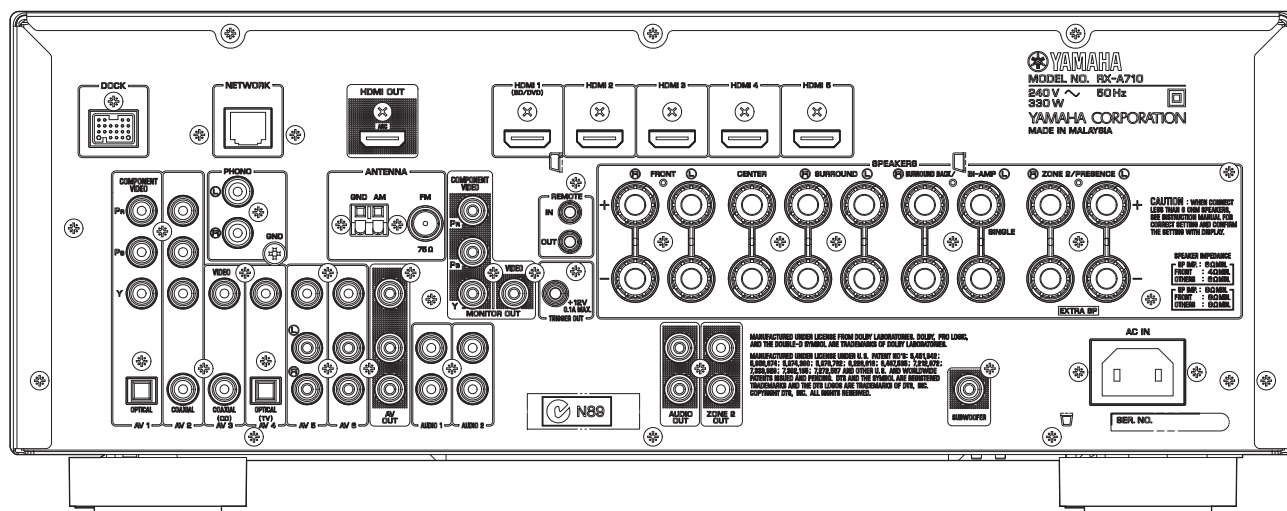
# RX-A710 (U model)



# RX-A710 (C model)



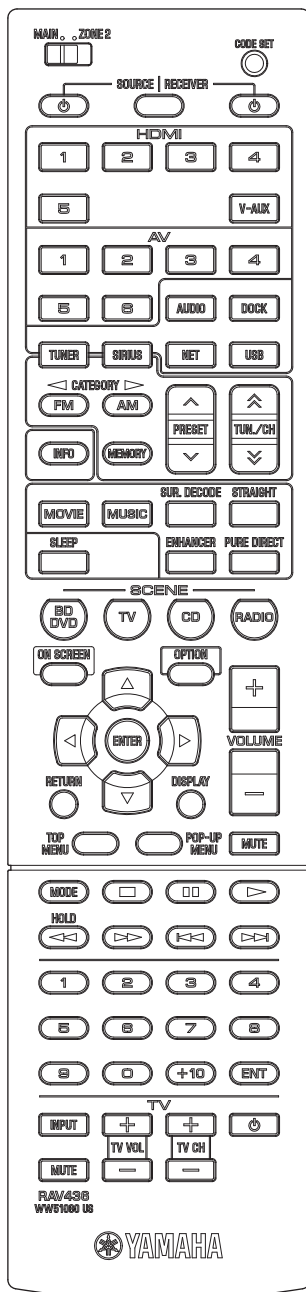
# RX-A710 (A model)



## ■ REMOTE CONTROL PANELS

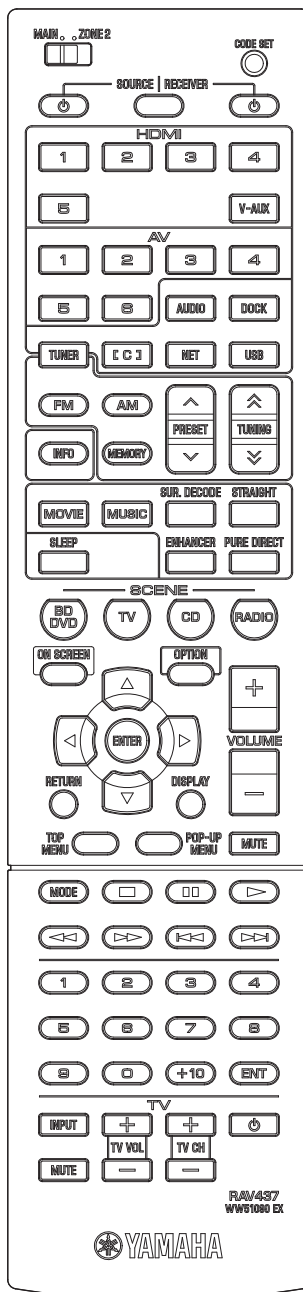
### RAV436

(U model)



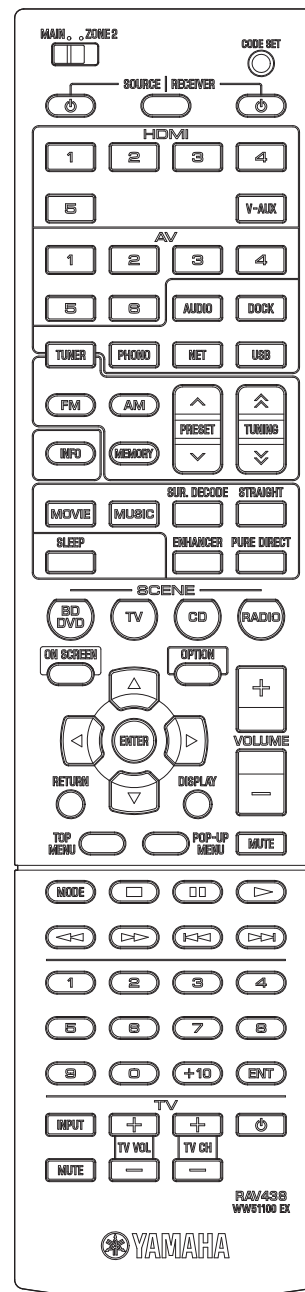
### RAV437

(C model)



### RAV438

(R, T, A, B, G, F, L, S models)



## SPECIFICATIONS

### ■ Audio Section

#### Rated Output Power (Power Amp. Section)

– 1 channel driven –	
(1 kHz, 0.9 % THD)	
U, C, R, T, A, B, G, F, L, S models (8 ohms)	
FRONT L/R	125 W/ch
CENTER	125 W
SURROUND L/R	125 W/ch
SURROUND BACK L/R	125 W/ch
B, G, F models (4 ohms)	
FRONT L/R	150 W/ch
– 2 channel driven simultaneously –	
(20 Hz to 20 kHz, 0.09 % THD, 8 ohms)	
FRONT L/R	90 W + 90 W
(1 kHz, 0.9 % THD, 8 ohms)	
FRONT L/R	105 W + 105 W
CENTER	105 W
SURROUND L/R	105 W + 105 W
SURROUND BACK L/R	105 W + 105 W

#### Maximum Effective Output Power (JEITA) [R, T, L, S models]

(1 channel driven, 1 kHz, 10 % THD, 8 ohms)	
FRONT L/R	150 W/ch
CENTER	150 W
SURROUND L/R	150 W/ch
SURROUND BACK L/R	150 W/ch

#### Dynamic Power Per Channel (IHF)

FRONT L/R (1 channel driven)	
(8 / 6 / 4 / 2 ohms)	130 / 170 / 200 / 240 W

#### Damping Factor (20 Hz to 20 kHz, 8 ohms)

FRONT L/R to SPEAKER-A	100 or more
------------------------	-------------

#### Input Sensitivity/Input Impedance (1 kHz, 100 W/8 ohms)

U, C models	
AV5 etc.	200 mV / 47 k-ohms
R, T, A, B, G, F, L, S models	
PHONO (MM)	3.5 mV / 47 k-ohms
AV5 etc.	200 mV / 47 k-ohms

#### Maximum Input Signal (1 kHz)

U, C models (0.5 % THD)	
AV5 etc. (EFFECT ON)	2.3 V
R, T, A, B, G, F, L, S models (0.1 % THD)	
PHONO (MM)	60 mV
	(0.5 % THD)
AV5 etc. (EFFECT ON)	2.3 V

#### Output Level/Output Impedance

REC OUT	200 mV / 1.2 k-ohms
SUBWOOFER (2 ch stereo and FRONT SP: small)	
	1 V / 1.2 k-ohms
ZONE2 OUT	200 mV / 1.2 k-ohms

#### Headphone Jack Rated Output/Output Impedance

(1 kHz, 50 mV, 8 ohms)	
AV5 etc. input	100 mV / 560 ohms

#### Frequency Response (10 Hz to 100 kHz)

AV5 etc., FRONT	0 / -3 dB
-----------------	-----------

#### RIAA Equalization Deviation [R, T, A, B, G, F, L, S models]

PHONO (MM)	0 ±0.5 dB
------------	-----------

#### Total Harmonic Distortion (20 Hz to 20 kHz)

U, C models (50 W/8 ohms)	
AV5 etc. (PURE DIRECT) to FRONT SP OUT	2.3 V
R, T, A, B, G, F, L, S models (1 V)	
PHONO (MM) to REC OUT	0.02 % or less
	(50 W/8 ohms)
AV5 etc. (PURE DIRECT) to FRONT SP OUT	2.3 V

#### Signal to Noise Ratio (IHF-A Network)

U, C models (Input shorted 250 mV)	
AV5 etc. (PURE DIRECT) to SP OUT	100 dB or more
R, T, A, B, G, F, L, S models (Input shorted 5 mV)	
PHONO (MM) to REC OUT	81 dB or more
	(Input shorted 250 mV)
AV5 etc. (PURE DIRECT) to SP OUT	100 dB or more

#### Residual Noise (IHF-A Network)

FRONT L/R to SP OUT	150 µV or less
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#### Channel Separation (1 kHz / 10 kHz)

PHONO (MM) (Input shorted)	60 dB or more / 55 dB or more
AV5 etc. (Input 5.1 k-ohms shorted)	
	60 dB or more / 45 dB or more

#### Volume Control/Step

	MUTE / -80 dB to +16.5 dB / 0.5 dB step
--	---

#### Tone Control Characteristics

Bass	
Boost/Cut	±6 dB / 0.5 dB step, at 50 Hz
Turnover frequency	350 Hz
Treble	
Boost/Cut	±6 dB / 0.5 dB step, at 20 kHz
Turnover frequency	3.5 kHz

#### Filter Characteristics

FRONT, CENTER, SURROUND, SURROUND BACK small (H.P.F.)	
	fc=40/60/80/90/100/110/120/160/200 Hz, 12 dB/oct.
SUBWOOFER small (L.P.F.)	
	fc=40/60/80/90/100/110/120/160/200 Hz, 24 dB/oct.

### ■ Video Section

#### Video Signal Type

Monitor out (Wall paper)	
U, C, R models	NTSC
T, A, B, G, F, L, S models	PAL
Video conversion	
	NTSC/PAL

#### Composite Video Signal Level

	1 Vp-p / 75 ohms
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#### S-Video Signal Level [B, G, F models]

Y	1 Vp-p / 75 ohms
C	0.286 Vp-p / 75 ohms

#### Component Video Signal Level

Y	1 Vp-p / 75 ohms
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#### Video Maximum Input Level (VIDEO Conversion Off)

	1.5 Vp-p or more
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#### Video Signal to Noise Ratio

	50 dB or more
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#### Monitor Out Frequency Response (VIDEO Conversion Off)

Component video signal level	5 Hz to 60 MHz, -3 dB
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## ■ FM Section

### Tuning Range

U, C models	87.5 to 107.9 MHz
R, L, S models	87.5 to 108.0 / 87.50 to 108.00 MHz
T, A, B, G, F models	87.50 to 108.00 MHz

### 50 dB Quieting Sensitivity (IHF) (1 kHz, 100 % MOD.)

Mono	3 µV (20.8 dBf)
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### Signal to Noise Ratio (IHF)

Mono	72 dB
Stereo	70 dB

### Harmonic Distortion (1 kHz)

Mono	0.3 %
Stereo	0.5 %

### Antenna Input

	75 ohms unbalanced
--	--------------------

## ■ AM Section

### Tuning Range

U, C models	530 to 1,710 kHz
R, L, S models	530 to 1,710 / 531 to 1,611 kHz
T, A, B, G, F models	531 to 1,611 kHz

### Antenna

	Loop antenna
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## ■ General

### Power Supply

U, C models	AC 120 V, 60 Hz
R, S models	AC 110–120/220–240 V, 50/60 Hz
T model	AC 220 V, 50 Hz
A model	AC 240 V, 50 Hz
B, G, F models	AC 230 V, 50 Hz
L model	AC 220–240 V, 50/60 Hz

### Power Consumption

U, C models	400 W / 500 VA
R, L, S models	300 W
T, A, B, G, F models	330 W

### Standby Power Consumption (reference data)

HDMI control: OFF / Standby through: OFF	0.1 W or less
HDMI control: ON / Standby through: ON	
INPUT: HDMI1 (HDMI no signal)	2.0 W (typical)
Network standby: ON	2.0 W (typical)

### Maximum Power Consumption [R, L, S models]

	590 W
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### Dimensions (W x H x D)

[RX-V671/HTR-6064]	435 x 161 x 363 mm (17-3/16" x 6-6/16" x 14-5/16")
[RX-A710]	435 x 171 x 366.6 mm (17-3/16" x 6-12/16" x 14-8/16")

### Weight

[RX-V671/HTR-6064]	10.52 kg (23.19 lbs.)
[RX-A710]	10.74 kg (23.68 lbs.)

## Finish

[RX-V671]	
T model	Gold color
U, C, R, T, A, B, G, F, L, S models	Black color
R, B, G, F, L, S models	Titanium color

## [HTR-6064]

A, F models	Black color
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## [RX-A710]

U, C, A models	Black color
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## Accessories

[RX-V671/HTR-6064/RX-A710]	
Remote control	x 1
Batteries (R03, AAA, UM-4)	x 2
FM antenna (1.4 m)	x 1
AM antenna (1.0 m)	x 1
YPAO microphone (6.0 m)	x 1
VIDEO AUX input cover	x 1
[RX-A710]	
Power cable (2 m)	x 1

\* Specifications are subject to change without notice.

<b>U</b> ..... <b>U.S.A. model</b>	<b>B</b> ..... <b>British model</b>
<b>C</b> ..... <b>Canadian model</b>	<b>G</b> ..... <b>European model</b>
<b>R</b> ..... <b>General model</b>	<b>F</b> ..... <b>Russian model</b>
<b>T</b> ..... <b>Chinese model</b>	<b>L</b> ..... <b>Singapore model</b>
<b>A</b> ..... <b>Australian model</b>	<b>S</b> ..... <b>Brazilian model</b>



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Institut  
Integrierte Schaltungen

MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.



This receiver supports network connections.

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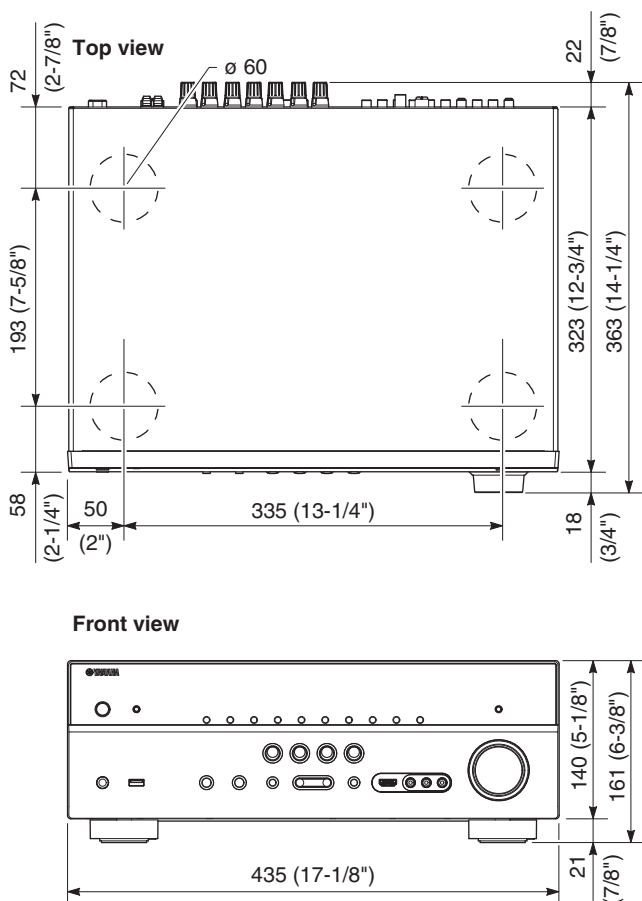


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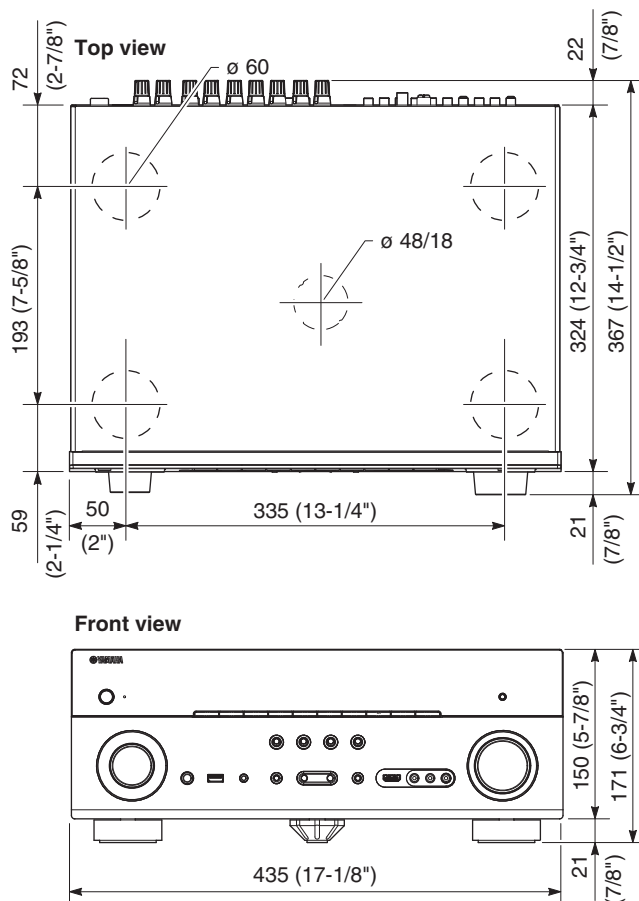
### • DIMENSIONS

#### RX-V671/HTR-6064



Unit: mm (inch)

#### RX-A710



Unit: mm (inch)

# - SELECT MENU

Sound field parameters

		Parameter																									
Category	Program	Decode Type (*1)	DSP Level: -6 to +3 dB, [0]	Initial Delay: 1 to 99 ms	Room Size: 0.1 to 2.0	Liveness: 0 to 10	Surround Initial Delay: 1 to 49 ms	Surround Room Size: 0.1 to 2.0	Surround Liveness: 0 to 10	Center Level: 0 to 100 %, [100 %]	Surround L Level: 0 to 100 %, [100 %]	Surround R Level: 0 to 100 %, [100 %]	Surround Back Level: 0 to 100 %, [100 %]	Surround Back Initial Delay: 1 to 49 ms	Surround Back Room Size: 0.1 to 2.0	Surround Back Liveness: 0 to 10	Surround Back L Level: 0 to 100 %, [7.1CH: 35 %, 6.1CH: 50 %]	Surround Back R Level: 0 to 100 %, [7.1CH: 35 %, 6.1CH: 50 %]	Front Presence L Level: 0 to 100 % [100 %]	Front Presence R Level: 0 to 100 % [100 %]	Reverb Time: 1.0 to 5.0 s	Reverb Delay: 0 to 250 ms	Reverb Level: 0 to 100 %	Direct: Auto / Off, [Auto]	Reset		
MOVIE THEATER	Standard	●	●				●	●	●					●	●	●										●	
	Spectacle	●	●	●	●		●	●						●	●											●	
	Sci-Fi	●	●	●	●		●	●						●	●											●	
	Adventure	●	●	●	●		●	●						●	●											●	
	Drama	●	●	●	●		●	●						●	●											●	
	Mono Movie		●	●	●	●																●	●	●		●	
ENTERTAINMENT	Sports		●	●	●		●	●						●	●											●	
	Action Game		●	●	●		●	●						●	●											●	
	Roleplaying Game		●	●	●		●	●						●	●											●	
	Music Video		●	●	●		●	●						●	●											●	
CLASSICAL	Hall in Munich		●	●	●	●																				●	
	Hall in Vienna		●	●	●	●																				●	
	Chamber		●	●		●																●	●	●		●	
LIVE/CLUB	Cellar Club		●	●	●	●																				●	
	The Roxy Theatre		●	●	●	●																●	●	●		●	
	The Bottom Line		●	●	●	●																				●	
STEREO	2ch Stereo																								●	●	
	7ch Stereo									●	●	●	●				●	●	●	●						●	
SUR. DECODE		●																								●	
STRAIGHT																											

\*1 Surround Decoder

Decode Type	Dolby Pro Logic
	Dolby PL IIx Movie / Dolby PL II Movie
	Dolby PL IIx Music / Dolby PL II Music
	Dolby PL IIx Game / Dolby PL II Game
	Neo:6 Cinema
	Neo:6 Music

## • SET MENU TABLE

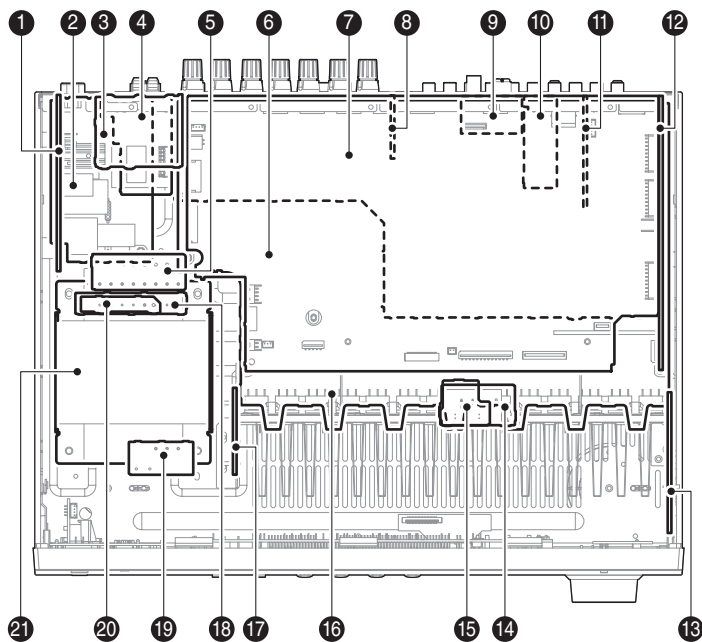
MAIN MENU	SUB-MENU		PARAMETER		VALUE [INITIAL VALUE]	
Speaker Setup	Auto	Measure			Optimizes the speaker configuration automatically using YPAO.	
		Result			Not Available	
	Manual	Power Amp Assign			[Basic] / 7ch +1ZONE / 5ch BI-AMP	
		Configuration	Front		Large / [Small] * When "Subwoofer" is set to "None", "Front" is disabled.	
			Center		Large / [Small] / None	
			Surround		Large / [Small] / None	
			Surround Back		Large x1 / Large x2 / Small x1 / [Small x2] / None	
			Front Presence		[Use] / None	
			Subwoofer		[Use] / None	
			Extra Bass		Not Available	
			Bass Cross Over		40 / 60 / [80] / 90 / 100 / 110 / 120 / 160 / 200 Hz	
			Distance			Meter / Feet
				Front L		0.30 to 24.00 m, [3.00 m], 0.05 m step 1.0 to 80.0 ft, [10.0 ft], 0.2 ft step
		Front R				
		Center				
		Surround L				
		Surround R				
		Surround Back L				
		Surround Back R				
		Front Presence L				
		Front Presence R				
		Subwoofer				
		Level	Front L		-10.0 to +10.0 dB, [0.0 dB], 0.5 dB step	
			Front R			
			Center			
			Surround L			
			Surround R			
			Surround Back L			
			Surround Back R			
			Front Presence L			
			Front Presence R			
			Subwoofer			
		Parametric EQ	PEQ Select		Manual / YPAO : Flat / YPAO : Front / YPAO : Natural / [Through]	
		PEQ Data Copy			Flat > Manual / Front > Manual / Natural > Manual * Select "ENTER"	
		Front L	Band / Gain	► Band: #1 to #7		
		Front R		▲ Gain: -20.0 to +6.0 dB, [0.0 dB], 0.5 dB step		
		Center	Freq. / Gain	► Frequency: 31.3 Hz to 16.0 kHz, [62.5 Hz] ▲ Gain: -20.0 to +6.0 dB, [0.0 dB], 0.5 dB step		
		Surround L				
		Surround R	Q / Gain	► Q: 0.500 to 10.080, [1.000] ▲ Gain: -20.0 to +6.0 dB, [0.0 dB], 0.5 dB step		
		Surround Back L				
		Surround Back R	Clear	OK / CANCEL * Select "ENTER"		
		Front Presence L	* When "PEQ Select" is set to "Manual", this section is disabled.			
		Front Presence R				
		Test Tone			[Off] / On	
Sound Setup	Lipsync			[Auto] / Manual		
		Select "Manual"		0 to 250 ms, [0 ms], 1 ms step		
	Dynamic Range			[Maximum] / Standard / Minimum/Auto		
	Max. Volume			-30.0 to +16.5 dB (Maximum volume), [+16.5 dB], 5.0 dB step		
	Initial Volume			[Off] / On		
		Select "On"		Mute, -80 to +16.5 dB, [0.0 dB], 0.5 dB step		
	Adaptive DSP Level			Off / [On]		
Video Setup	Analog to Analog Conversion			Off / [On]		
	Processing			[Off] / On		
		Resolution		Through / [Auto] / 576p / 720p / 1080i / 1080p * Select "ENTER"		
		Aspect		[Through] / 16:9 Normal		

MAIN MENU	SUB-MENU		PARAMETER		VALUE [INITIAL VALUE]		
HDMI Setup	HDMI Control				[Off] / On		
			TV Audio Input		AV1 / AV2 / AV3 / [AV4] / AV5 / AV6 / AUDIO1 / AUDIO2		
			ARC (Audio Return Channel)		Off / [On]		
			Standby Sync		Off / On / [Auto]		
	Audio Output	Amp		Off / [On]			
		HDMI OUT (TV)		[Off] / On			
	Standby Through				[Off] / On  * When HDMI Control is set to “On”, “Standby Through” is disabled.		
Network Setup	IP Address	DHCP		[Off] / On			
		IP Address		xxx.xxx.xxx. x			
		Subnet Mask		xxx.xxx.xxx. x			
		Default Gateway		xxx.xxx.xxx. x			
		DNS Server (P)	Primary	x. x. x. x			
		DNS Server (P)	Secondary	x. x. x. x			
	Network Standby				[Off] / On		
	MAC Address Filter	Mode				[Off] / On	
		Address Setup				MAC Address 1 to 10 xx : xx : xx : xx : xx : xx	
Multi Zone Setup	Zone2 Set	Max. Volume		-30.0 to +16.5 dB (Maximum volume), [+16.5 dB], 5.0dB step			
		Initial Volume		[Off] / On			
	Zone Rename	Main		Input is possible to 9 characters			
		Zone2					
Function Setup	Auto Power Down				[Off] / 4 Hours / 8 Hours / 12 Hours		
	Display Set	Front Panel Display	Dimmer		-4 to 0		
			Scroll		[Continue] / Once		
		Short Message		[On] / Off			
		Wall Paper		Picture1 / Picture2 / Picture3 / Gray			
	Trigger Output	Trigger Mode				[Power] / Source / Manual	
		Target Zone				Main / Zone2 / [All]  * When “Trigger Mode” is set to “Power”, “Target Zone” is disabled.	
		Target Source	HDMI1				Low / [High]  * When “Trigger Mode” is set to “Source”, “Target Source” is disabled.
			HDMI2				
			HDMI3				
			HDMI4				
			HDMI5				
			AV1				
			AV2				
			AV3				
			AV4				
			AV5				
			AV6				
			V-AUX				
			AUDIO1				
			AUDIO2				
			PHONO				
			TUNER				
Napster							
PC							
NET RADIO							
USB							
DOCK							
Manual				Low / [High]  * When “Trigger Mode” is set to “Manual”, “Manual” is disabled.			
Memory Guard				[Off] / On			
Language Setup					English (English), 日本語 (Japanese), Français (Franch), Deutsch (German), Español (Spanish), Русский (Russian)		

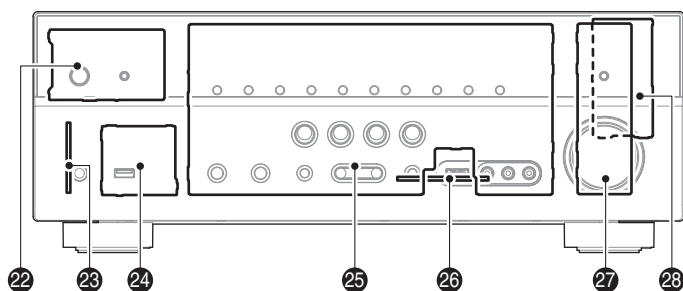
## INTERNAL VIEW

### RX-V671/HTR-6064

Top view

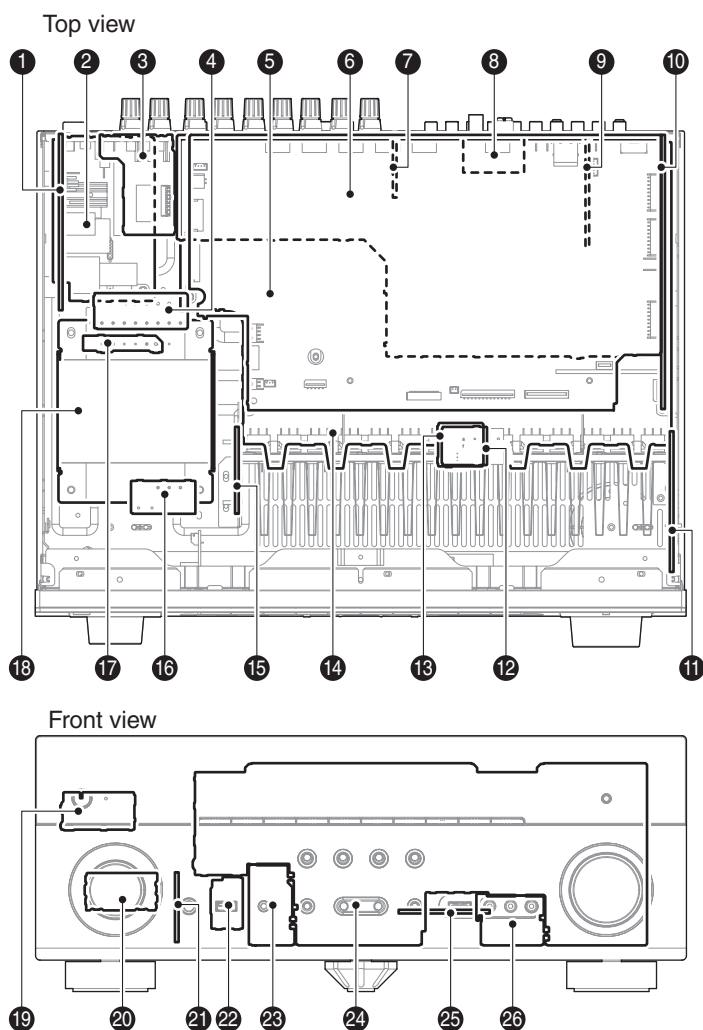


Front view



- 1 VIDEO (2) P.C.B.
- 2 VIDEO (3) P.C.B.
- 3 VIDEO (8) P.C.B. (R, S models)
- 4 OPERATION (8) P.C.B.
- 5 MAIN (2) P.C.B.
- 6 DIGITAL (1) P.C.B.
- 7 VIDEO (1) P.C.B.
- 8 VIDEO (4) P.C.B.
- 9 AM/FM TUNER
- 10 VIDEO (5) P.C.B. (B, G, F models)
- 11 VIDEO (10) P.C.B. (R, T, A, B, G, F, L, S models)
- 12 OPERATION (2) P.C.B.
- 13 OPERATION (7) P.C.B.
- 14 OPERATION (9) P.C.B. (U, C models)
- 15 OPERATION (10) P.C.B. (R, T, A, B, G, F, L, S models)
- 16 MAIN (1) P.C.B.
- 17 MAIN (6) P.C.B.
- 18 VIDEO (9) P.C.B. (R, S models)
- 19 VIDEO (7) P.C.B.
- 20 VIDEO (6) P.C.B. (U, C, T, A, B, G, F, L models)
- 21 POWER TRANSFORMER
- 22 OPERATION (4) P.C.B.
- 23 OPERATION (3) P.C.B.
- 24 OPERATION (11) P.C.B.
- 25 OPERATION (1) P.C.B.
- 26 DIGITAL (2) P.C.B.
- 27 OPERATION (5) P.C.B.
- 28 OPERATION (6) P.C.B.

## RX-A710



- ① VIDEO (2) P.C.B.
- ② VIDEO (3) P.C.B.
- ③ OPERATION (8) P.C.B.
- ④ MAIN (2) P.C.B.
- ⑤ DIGITAL (1) P.C.B.
- ⑥ VIDEO (1) P.C.B.
- ⑦ VIDEO (4) P.C.B.
- ⑧ AM/FM TUNER
- ⑨ VIDEO (10) P.C.B. (A model)
- ⑩ OPERATION (2) P.C.B.
- ⑪ OPERATION (7) P.C.B.
- ⑫ OPERATION (9) P.C.B. (U, C models)
- ⑬ OPERATION (10) P.C.B. (A model)
- ⑭ MAIN (1) P.C.B.
- ⑮ MAIN (6) P.C.B.
- ⑯ VIDEO (7) P.C.B.
- ⑰ VIDEO (6) P.C.B.
- ⑱ POWER TRANSFORMER
- ⑲ OPERATION (5) P.C.B.
- ⑳ OPERATION (6) P.C.B.
- ㉑ OPERATION (3) P.C.B.
- ㉒ OPERATION (11) P.C.B.
- ㉓ OPERATION (4) P.C.B.
- ㉔ OPERATION (1) P.C.B.
- ㉕ DIGITAL (2) P.C.B.
- ㉖ OPERATION (12) P.C.B.

## ■ SERVICE PRECAUTIONS

### Safety measures

- Some internal parts in this product contain high voltages and are dangerous.  
Be sure to take safety measures during servicing, such as wearing insulating gloves.
- Note that the capacitors indicated below are dangerous even after the power is turned off because an electric charge remains and a high voltage continues to exist there.  
Before starting any repair work, connect a discharging resistor (5 k-ohms/10 W) to the terminals of each capacitor indicated below to discharge electricity.  
The time required for discharging is about 30 seconds per each.

C1076, C1082–1086 on MAIN (1) P.C.B.

C3706 on VIDEO (2) P.C.B.

For details, refer to "PRINTED CIRCUIT BOARDS".

## ■ DISASSEMBLY PROCEDURES

### RX-V671/HTR-6064

#### RX-V671/HTR-6064

(Remove parts in the order as numbered.)

Disconnect the power cable from the AC outlet.

#### 1. Removal of Top Cover

- Remove 4 screws (①) and 5 screws (②). (Fig. 1)
- Lift the rear of the top cover to remove it.

#### 2. Removal of Front Panel Unit

- Remove 7 screws (③), and remove W4401. (Fig. 1)
- Remove CB10, CB81, CB458, CB472, CB902 and CB951 (Fig. 1)
- Release 2 hooks, and remove the front panel unit. (Fig. 1)

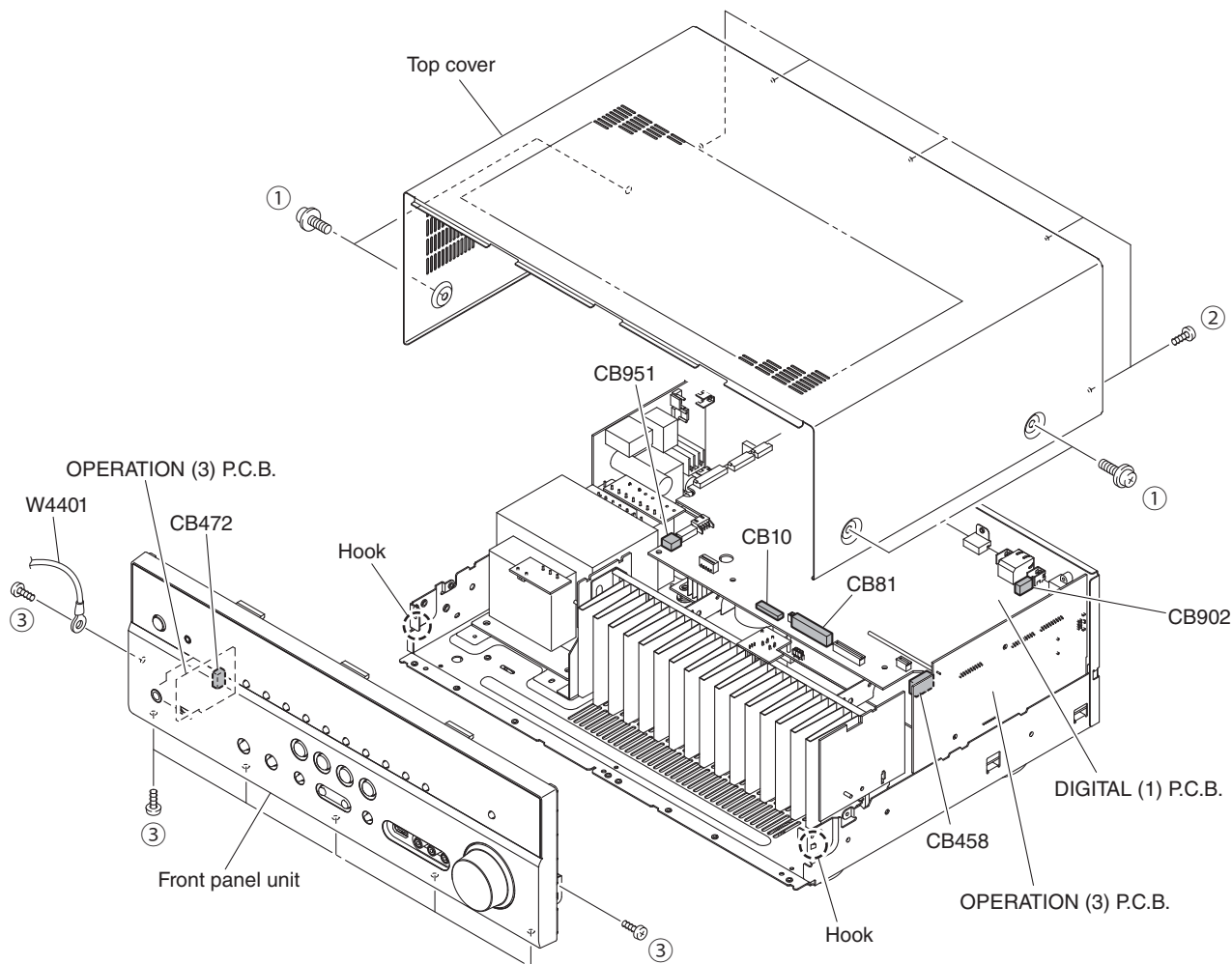


Fig. 1



### 3. Removal of DIGITAL (1) P.C.B.

- Remove 3 screws (④) and 6 screws (⑤). (Fig. 3)
- Remove 3 screws. (⑥). (Fig. 2)
- Remove CB21, CB23, CB82, CB87 and CB947. (Fig. 2)
- Unlock and remove CB83, CB85 and CB948. (Fig. 2)
- Remove the DIGITAL (1) P.C.B. which is connected directly to the OPERATION (2) P.C.B. with board-to-board connectors. (Fig. 2)

### 4. Removal of AMP Unit

- Remove screw (⑦), 2 screws (⑧) and 4 screws (⑨). (Fig. 2)
- Remove 3 screws (⑩). (Fig. 3)
- Remove the amp unit. (Fig. 2)

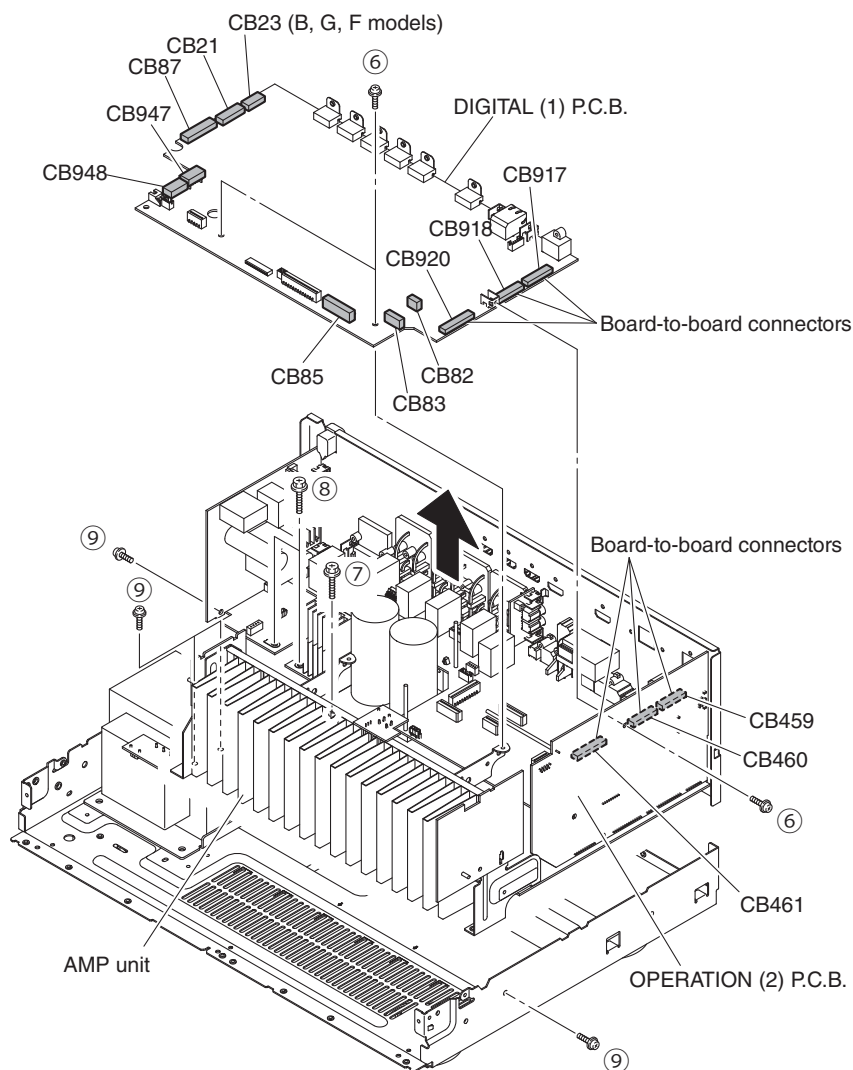
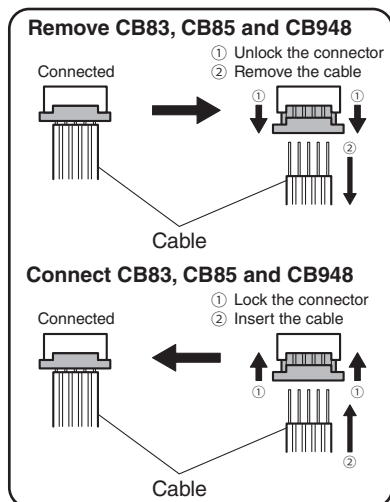


Fig. 2

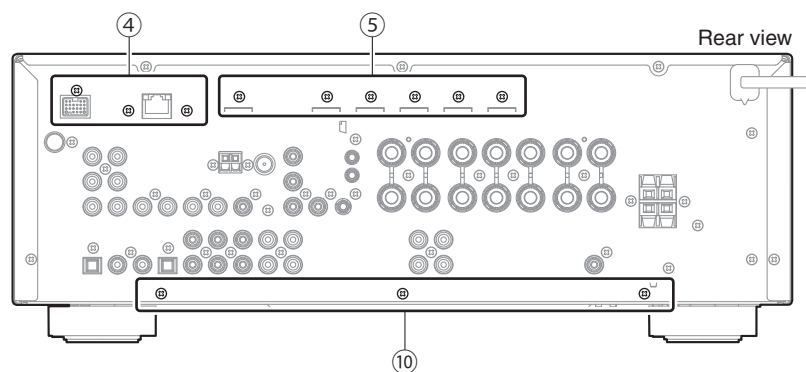
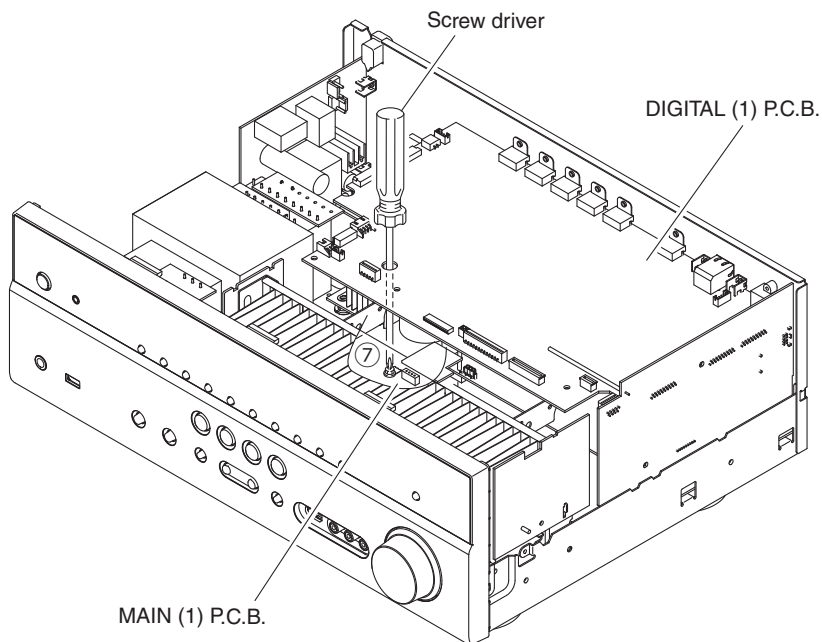
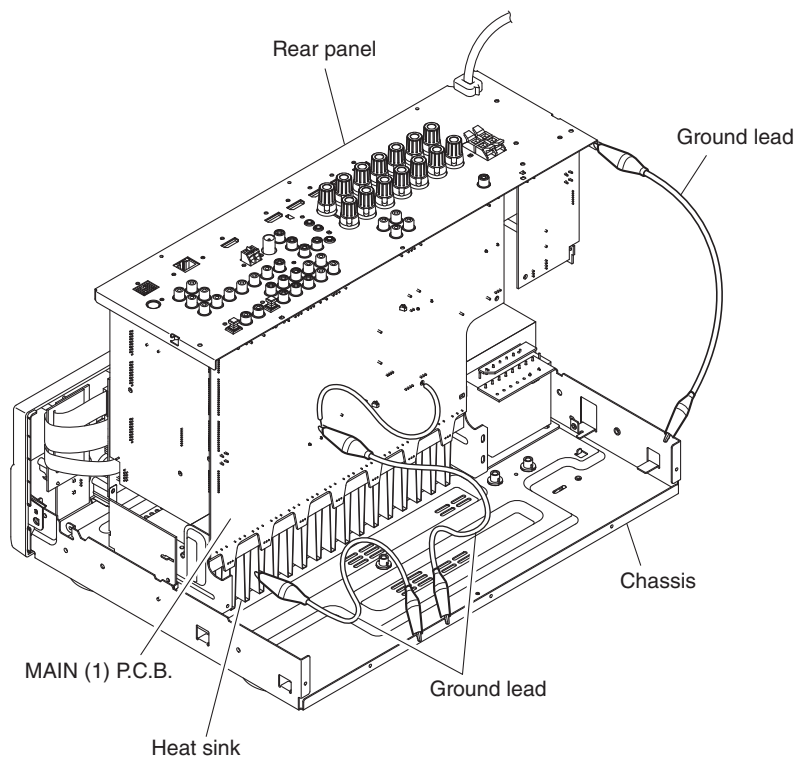


Fig. 3

**When checking the P.C.B.s:**

- Follow the procedure below to place the P.C.B.s (with rear panel) upright. (Fig. 5)
  - a. Remove the top cover. (Fig. 1)
  - b. Remove screw (7), 2 screws (8) and 4 screws (9). (Fig. 2)
  - c. Remove 3 screws (10). (Fig. 3)
- Connect the heatsink, rear panel and G101 on MAIN (1) P.C.B. to the chassis with a ground lead or the like. (Fig. 5)
- Reconnect all cables (connectors) that have been disconnected.
- When connecting the flexible flat cable, be careful with polarity.

**Fig. 4****Fig. 5**

## RX-A710

**RX-A710**

(Remove parts in the order as numbered.)

Disconnect the power cable from the AC outlet.

**1. Removal of Top Cover**

- a. Remove 4 screws (①), screw (②) and 5 screws (③). (Fig. 1)
- b. Slide the top cover rearward to remove it. (Fig. 1)

**2. Removal of Front Panel Unit and Sub-Chassis Unit**

- a. Remove knob. (Fig. 1)
- b. Remove 6 screws (④) and then remove the front panel unit. (Fig. 1)
- c. Remove 2 push rivets and then remove the side plate (L) and side plate (R). (Fig. 1)
- d. Remove CB10, CB458, CB471, CB902 and CB951. (Fig. 1)
- e. Remove 2 screws (⑤) and then remove the sub-chassis unit. (Fig. 1)

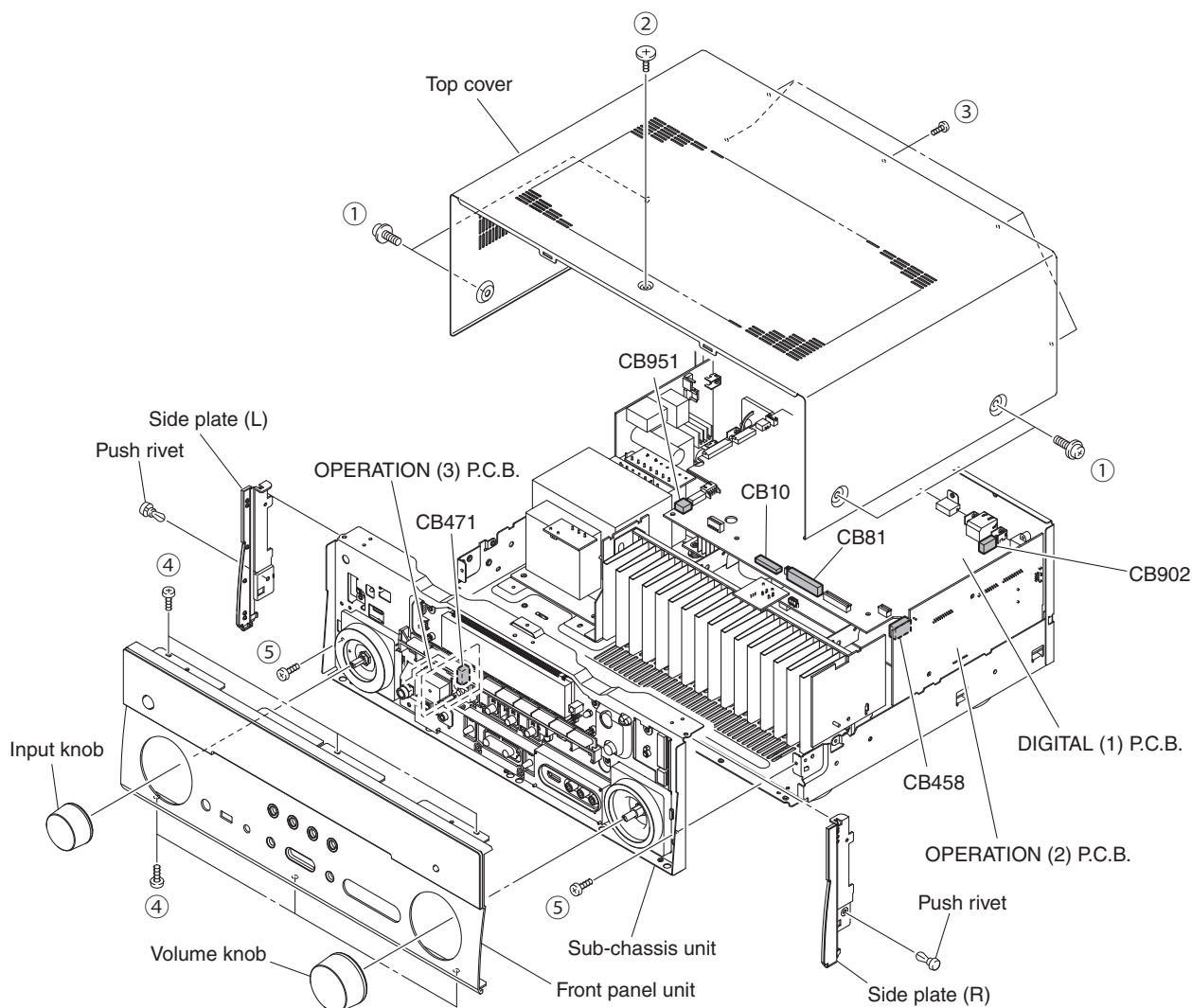


Fig. 1

### 3. Removal of DIGITAL (1) P.C.B.

- Remove 3 screws (⑥) and 6 screws (⑦). (Fig. 3)
- Remove 3 screws. (⑧). (Fig. 2)
- Remove CB21, CB82, CB87 and CB947. (Fig. 2)
- Unlock and remove CB83, CB85 and CB948. (Fig. 2)
- Remove the DIGITAL (1) P.C.B. which is connected directly to the OPERATION (2) P.C.B. with board-to-board connectors. (Fig. 2)

### 4. Removal of AMP Unit

- Remove screw (⑨), 2 screws (⑩) and 5 screws (⑪). (Fig. 2)
- Remove 3 screws (⑫). (Fig. 3)
- Remove the amp unit. (Fig. 2)

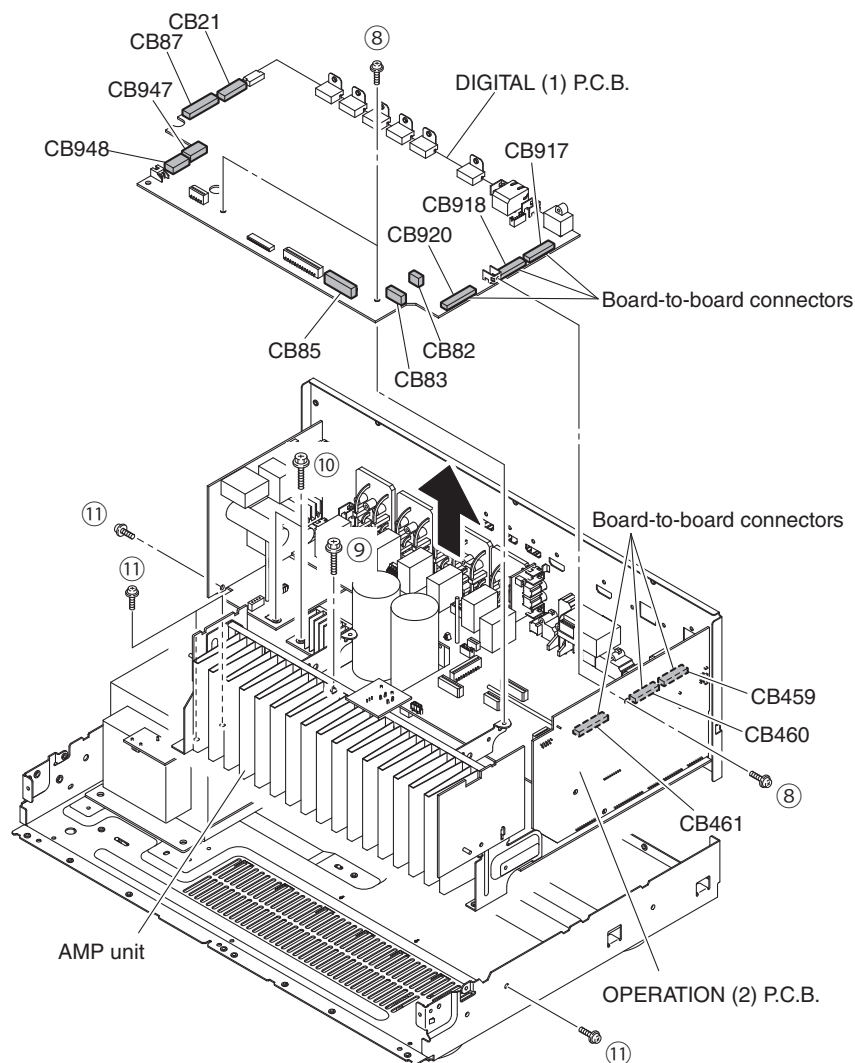
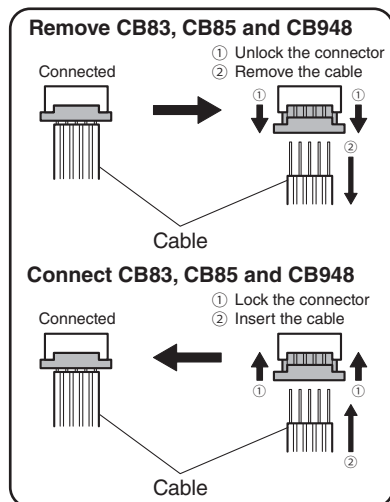


Fig. 2

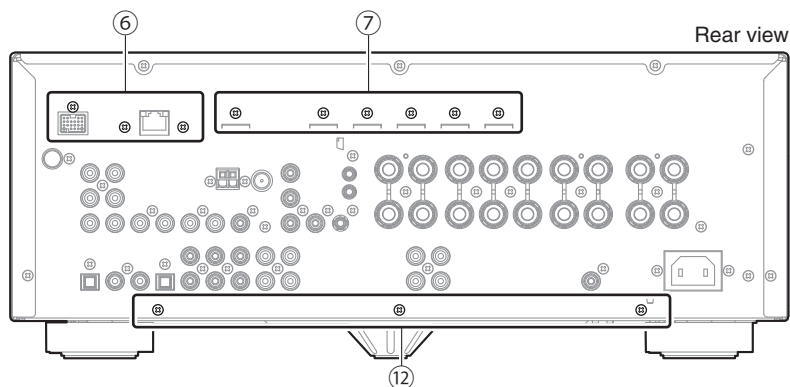
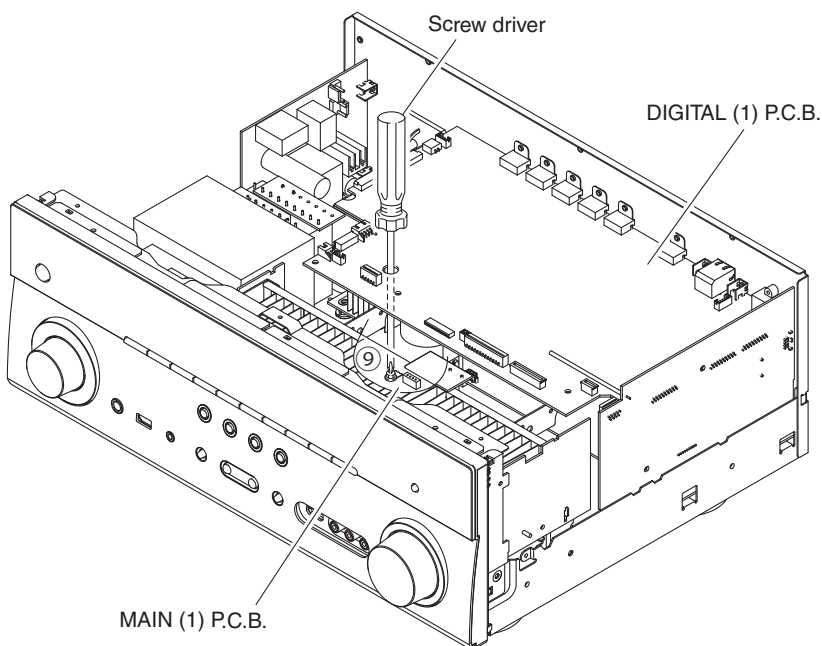
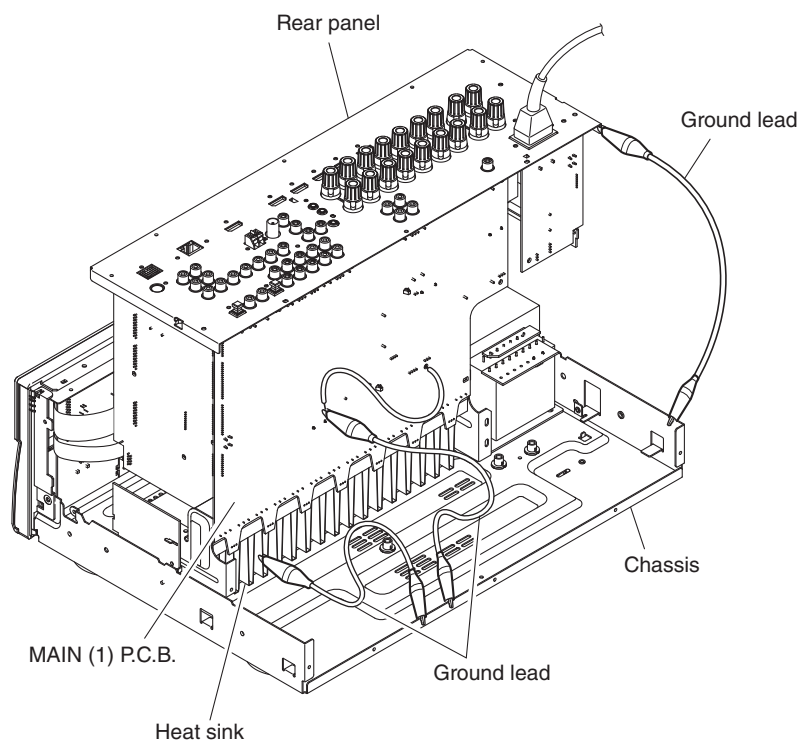


Fig. 3

**When checking the P.C.B.s:**

- Follow the procedure below to place the P.C.B.s (with rear panel) upright. (Fig. 5)
  - a. Remove the top cover. (Fig. 1)
  - b. Remove screw (9), 2 screws (10) and 5 screws (11). (Fig. 2)
  - c. Remove 3 screws (12). (Fig. 3)
- Connect the heatsink, rear panel and G101 on MAIN (1) P.C.B. to the chassis with a ground lead or the like. (Fig. 5)
- Reconnect all cables (connectors) that have been disconnected.
- When connecting the flexible flat cable, be careful with polarity.

**Fig. 4****Fig. 5**

## ■ UPDATING FIRMWARE

When the following parts are replaced, the firmware must be updated to the latest version.

DIGITAL P.C.B.

FPGA Flash ROM: IC82 on DIGITAL P.C.B.

NETWORK Flash ROM: IC904 on DIGITAL P.C.B.

DSP(TI) Flash ROM: IC923 on DIGITAL P.C.B.

### ● Confirmation of firmware version and checksum

Before and after updating the firmware, check the firmware version and checksum by using the self-diagnostic function menu.

Start up the self-diagnostic function and select "S4. ROM VER/SUM" menu.

Using the sub-menu, have the firmware version and checksum displayed, and note them down.  
(See "SELF-DIAGNOSTIC FUNCTION")

\* When the firmware version is different from written one after updating, perform the updating procedure again from the beginning.

### ● Initializing the back-up IC (EEPROM: IC83 on DIGITAL (1) P.C.B.)

After updating the firmware, the back-up IC MUST be initialized by the following procedure to have proper memorization of the set up information (soundfield parameters, system memory and tuner presetting, etc.).

Start up the self-diagnostic function and select "S3. FACTORY PRESET" menu. (See "SELF-DIAGNOSTIC FUNCTION")

Select "PRESET RSRV", press the "MAIN ZONE  $\phi$ " key to turn off the power once and turn on the power again. Then the back-up IC is initialized.

### ● Required Tools

- USB storage device
- Firmware  
RX-V671/HTR-6064/RX-A710: RXV671-xxxx.bin

### ● Preparation

1. Download the latest firmware from the specified download source to the folder of the PC.
2. Copy the latest firmware from the PC to the root folder of the USB storage device.

Note) When the latest firmware is copied to a sub-folder of the USB storage device, the update will not proceed.

## ● Operation Procedures

1. Insert the USB storage device to the USB port. (Fig. 1)
2. While pressing the "PURE DIRECT" key, connect the power cable to the AC outlet. (Fig. 1)

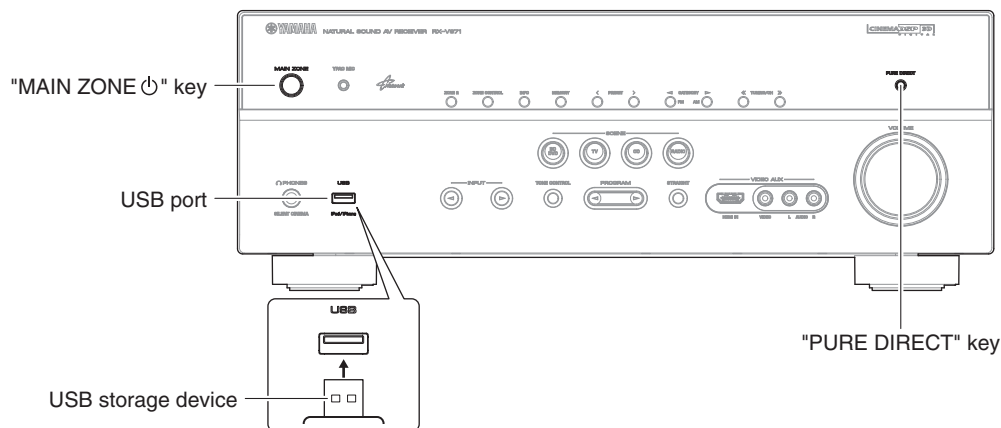


Fig. 1

3. The USB UPDATE mode is activated and "USB UPDATE" is displayed. Writing of the firmware starts automatically. (Fig. 2)



Fig. 2

4. When writing of the firmware is completed, "Update Success", "Please..." and "Power Off!" are displayed repeatedly. (Fig. 3)

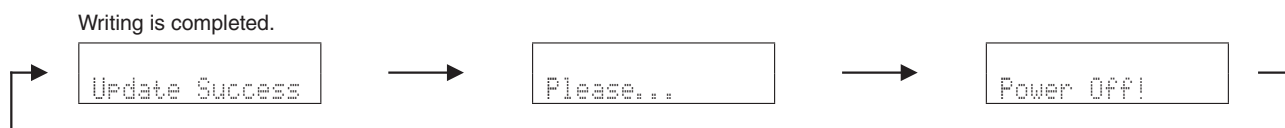


Fig. 2

5. Press the "MAIN ZONE" key to turn off the power. (Fig. 1)
6. Remove the USB storage device from the USB port. (Fig. 1)
7. Start up the self-diagnostic function and check that the firmware version and checksum are the same as written ones. (See "Confirmation of firmware version and checksum")

## ■ SELF-DIAGNOSTIC FUNCTION

This unit has self-diagnostic functions that are intended for inspection, measurement and location of faulty point.

There are 25 main menu items, each of which has sub-menu items.

Listed in the table below are main menu items and sub-menu items.

Note that not all menu items listed will apply to the models covered in this service manual.

No.	Main menu	No.	Sub-menu
A: Audio system			
A1	DSP AUDIO	1	DSP MARGIN
		2	DSP NON MARGIN
		3	INVALID ITEM (Not for service)
		4	DSP FULL CENTER
		5	DSP FULL SURROUND
		6	DSP FULL SURROUND BACK
		7	DSP FULL SUBWOOFER
A2	DIRECT AUDIO	1	ANALOG DIRECT VH
		2	ANALOG DIRECT VL
A3	HDMI AUDIO	1	HDMI AUTO
		2	INVALID ITEM (Not for service)
		3	ARC1
		4	INVALID ITEM (Not for service)
A4	SPEAKERS SET	1	BI-AMP
		2	ZONE/TONE=MAX
		3	ZONE/TONE=MIN
		4	INVALID ITEM (Not for service)
		5	INVALID ITEM (Not for service)
		6	D-PARTY MODE
		7	FULL MUTE
		8	INVALID ITEM (Not for service)
		9	INVALID ITEM (Not for service)
		10	INVALID ITEM (Not for service)
A5	MULTI CHANNEL INPUT (Not for service)	1	8 CHANNEL INPUT 8 ohms
		2	8 CHANNEL INPUT 6 ohms
A6	MIC CHECK	1	MIC ROUTE CHECK
A7	MANUAL TEST	1	TEST ALL
		2	TEST FRONT L
		3	TEST CENTER
		4	TEST FRONT R
		5	TEST SURROUND R
		6	TEST SURROUND BACK R
		7	TEST SURROUND BACK L
		8	TEST SURROUND L
		9	TEST FRONT PRESENCE L
		10	TEST FRONT PRESENCE R
		11	INVALID ITEM (Not for service)
		12	INVALID ITEM (Not for service)
		13	TEST LFE 1
		14	INVALID ITEM (Not for service)
D: Display system			
D1	FL CHECK	1	FL CHECK
		2	ALL SEGMENT OFF
		3	ALL SEGMENT ON
		4	CHECK PATTERN 1
		5	CHECK PATTERN 2



No.	Main menu	No.	Sub-menu
Z: Zone system			
Z1	ZONE TEST	1	AV1 (Not for service)
		2	AV2 (Not for service)
		3	AV3 (Not for service)
		4	AV4 (Not for service)
		5	AV5 (Not for service)
		6	AV6 (Not for service)
		7	AUDIO1
		8	AUDIO2
		9	V-AUX
		10	PHONO
R: Radio and satellite broadcasting system			
R1	SIRIUS (U model)	1	SIRIUS
		2	SR
		3	SSP
		4	MAC
		5	ADP
		6	PRDID
		7	SEQID
		8	POWER OFF
U: Universal system			
U1	iPod	1	DOCK CHECK
U2	USB	1	BF TEST 1kHz
		2	BF TEST 20Hz (Not for service)
		3	BF TEST 20kHz (Not for service)
		4	USB FRONT 1 TRACK
		5	USB FRONT 2 TRACK
U3	INVALID ITEM (Not for service)		
N: Network system			
N1	NETWORK	1	IP ADDRESS CHECK
		2	MAC ADDRESS CHECK
		3	LINE NOISE 10 (Not for service)
		4	LINE NOISE 100 (Not for service)
		5	EXT TEST
		6	MAC ADDRESS
C: Communication system			
C1	DIGITAL PCB CHECK	1	ALL (Not for service)
		2	BUS FLASH ROM
		3	BUS FPGA
		4	I2C
		5	FPGA RAM
		6	BUS DIR
		7	BUS DSP1
		8	EEPROM
		9	INVALID ITEM (Not for service)
		10	LINK CHECK
		11	PHY TEST
		12	I2C EEPROM
		13	BUS RAM
		14	SYNC SERIAL
		15	CLOCK GENERATION
		16	APL ID CHECK
C2	INVALID ITEM (Not for service)		

No.	Main menu	No.	Sub-menu
C3	HDMI INFORMATION	1	HDMI MODEL NAME
		2	HDMI ID
V: Video system			
V1	ANALOG VIDEO CHECK	1	ANALOG BYPASS
		2	DIGITAL BYPASS
		3	INVALID ITEM (Not for service)
		4	MUTE CHECK
		5	TEST PATTERN
		6	VIDEO IN
V2	DIGITAL VIDEO CHECK	1	LOOPBACK TEST 1
		2	LOOPBACK TEST 2
		3	INVALID ITEM (Not for service)
		4	HDMI REPEAT
		5	DIGITAL CVBS
		6	DIGITAL Y/C (B, G, F models)
		7	DIGITAL COMPONENT
		8	DIGITAL COMPONENT SC
		9	GUI-VIDEO OUT
V3	TEST PATTERN	1	480i
		2	480p
		3	720p 60Hz
		4	1080i 60Hz
		5	1080p 60Hz
		6	576i
		7	576p
		8	720p 50Hz
		9	1080i 50Hz
		10	1080p 50Hz
		11	1080p 24bit
		12	1080p 24bit 3D/FP
		13	720p 60Hz 3D/FP
		14	720p 50Hz 3D/FP
		15	1080i 60Hz 3D/SS
		16	1080i 50Hz 3D/SS
		17	720p 60Hz 3D/TB
		18	720p 50Hz 3D/TB
		19	1080p 24bit 3D/TB
P: Power and protection system			
P1	SYSTEM MONITOR	1	DC
		2	PS1/PS2
		3	TM
		4	INVALID ITEM (Not for service)
		5	OUTPUT LEVEL
		6	LIMITER CONTROL
		7	L3 (J model) (Not for service)
		8	KEY1/KEY2
P2	PROTECTION HISTORY	1	HISTORY 1
		2	HISTORY 2
		3	HISTORY 3
		4	HISTORY 4

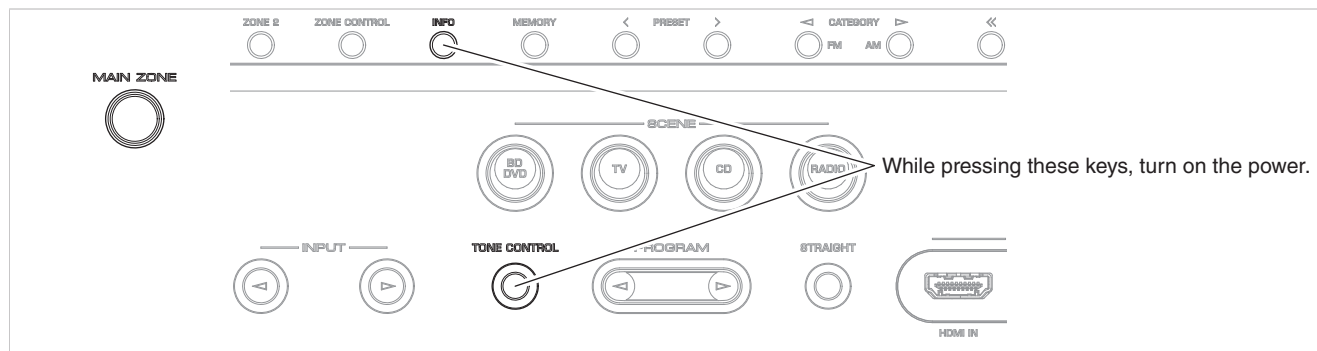
No.	Main menu	No.	Sub-menu
<b>S:</b> System and version system			
S1	FIRMWARE UPDATE	1	F/W UPDATE (Not for service)
S2	SET INFORMATION	1	MODEL
		2	DESTINATION
		3	DEBUG (Not for service)
S3	FACTORY PRESET	1	PRESET INH/RSRV
S4	ROM VERSION/CHECKSUM	1	SYSTEM VERSION
		2	MICROPROCESSOR VERSION
		3	MICROPROCESSOR CHECKSUM
		4	FLASH ROM VERSION
		5	FLASH ROM CHECKSUM
		6	BF VERSION
		7	BF CHECKSUM
		8	DSP1 VERSION
		9	DSP1 CHECKSUM
		10	INVALID ITEM (Not for service)
		11	INVALID ITEM (Not for service)
		12	GUI VERSION
		13	FPGA GUI VERSION
		14	FPGA IP VERSION
		15	SIRIUS VERSION (U model)
		16	INVALID ITEM (Not for service)
		17	HD RADIO VERSION (U model)

## ● Starting Self-Diagnostic Function

While pressing the “TONE CONTROL” and “INFO” keys, press the “MAIN ZONE ⏻” key to turn on the power.

The self-diagnostic function mode is activated.

Keys of this unit



## ● Starting Self-Diagnostic Function in the protection cancel mode

If the protection function works and causes hindrance to trouble shoot, cancel the protection function as described below, and it will be possible to enter the self-diagnostic function mode. (The protection functions other than the excess current detect function will be disabled.)

While pressing the “TONE CONTROL” and “INFO” keys, press the “MAIN ZONE ⏻” key to turn on the power and keep pressing those 2 keys for 3 seconds or longer.

The self-diagnostic function mode is activated with the protection functions disabled.

In this mode, the “SLEEP” segment of the FL display flashes to indicate that the mode is self-diagnostic function mode with the protection functions disabled.

### CAUTION!

Using this product with the protection function disabled may cause further damage to this unit. Use special care for this point when using this mode.

## ● Canceling Self-Diagnostic Function

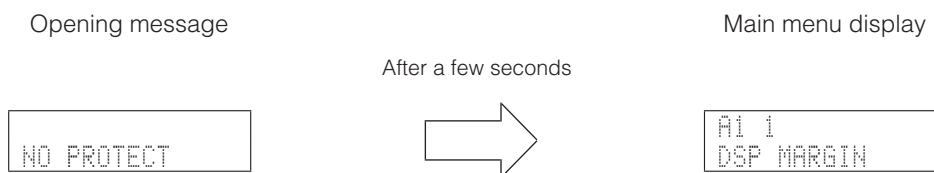
- Before canceling self-diagnostic function, execute setting for "S3. FACTORY PRESET" menu. (Memory initialization inhibited or Memory initialized).
  - \* In order to keep the user memory preserved, be sure to select PRESET INHIBIT (Memory initialization inhibited).
- Press the "MAIN ZONE ⏻" key to turn off the power.

## ● Display provided when Self-Diagnostic Function started

The display is as described below depending on the situation the last time the power to this unit is turned off.

### 1. When the power is turned off by usual operation:

"NO PROTECT" is displayed. "A1-1. DSP MARGIN" menu is displayed in a few seconds.



### 2. When the protection function worked to turn off the power:

The data of protection function which worked at the moment is displayed. Then "A1-1. DSP MARGIN" menu is displayed in a few seconds.

Note: At that time if you reactivate the self-diagnostic function after turning off the power once by pressing the "MAIN ZONE ⏻" key, "NO PROTECT" will be displayed because that situation is equal to "1. When the power is turned off by usual operation:" described above.

However the protection function history is stored in a back-up IC with a backup. For details, refer to "P2 PROTECTION HISTORY" menu.

#### 2-1. When there is a history of protection function due to excess current.

```

graph LR
    A[I PROTECT]
  
```

**Cause:** An excessive current flowed through the power amplifier.

**Supplementary information:** As current of the power amplifier is detected, the abnormal channel can be identified by checking the current detect transistor.

Turning on the power without correcting the abnormality will cause the protection function to work immediately and the power supply will instantly be shut off.

#### Notes)

- Applying the power to this unit without correcting the abnormality can be dangerous and cause additional circuit damage. To avoid this, if "I PROTECT" protection function works 1 time, the power will not turn on even when the "MAIN ZONE ⏻" key is pressed. In order to turn on the power again, start up the self-diagnostic function.
- The output transistors in each amplifier channel should be checked for damage before applying power to this unit.
- Amplifier current should be monitored by measuring DC voltage across the emitter resistors for each channel.

**2-2. When the protection function worked due to abnormal DC output.**


DC PRT:xxxH

AD conversion value when the protection function is working

**Cause:** DC output of the power amplifier is abnormal.

**Supplementary information:** The protection function worked due to a DC voltage appearing at the speaker terminal. A cause could be a defect in the amplifier.

Turning on the power without correcting the abnormality will cause the protection function to work in 5 seconds and the power supply will be shut off.

**2-3. When the protection function worked due to abnormal voltage in the power supply section.**


PS PRT:xxxL

AD conversion value when the protection function is working

**Cause:** The voltage in the power supply section is abnormal.

**Supplementary information:** The protection function worked due to a defect or overload in the power supply.

Turning on the power without correcting the abnormality will cause the protection function to work in 1 seconds and the power supply will be shut off.

**Notes)**

- Applying the power to this unit without correcting the abnormality can be dangerous and cause additional circuit damage. To avoid this, if “PS” and “DC” protection function works 3 times consecutively, the power will not turn on even when the “MAIN ZONE ⏻” key is pressed. In order to turn on the power again, start up the self-diagnostic function.
- The output transistors in each amplifier channel should be checked for damage before applying power to this unit.
- Amplifier current should be monitored by measuring DC voltage across the emitter resistors for each channel.

#### 2-4. When the protection function worked due to excessive heatsink temperature.

TMF1PRT:xxxL

AD conversion value when the protection function is working

**Cause:** The temperature of the heatsink is excessive.

**Supplementary information:** The protection function worked due to the temperature limit being exceeded. Causes could be poor ventilation or a defect related to the thermal sensor.

Turning on the power without correcting the abnormality will cause the protection function to work in 1 seconds and the power supply will be shut off.

#### ● History of protection function

When the protection function has worked, its history is stored in memory with a backup.

Even if no abnormality is noted while servicing the unit, an abnormality which has occurred previously can be defined as long as the backup data has been stored.

For details, refer to “P2 PROTECTION HISTORY” menu.

## ● Operation procedure of Main menu and Sub-menu

There are 25 main menu items, each of which has sub-menu items.

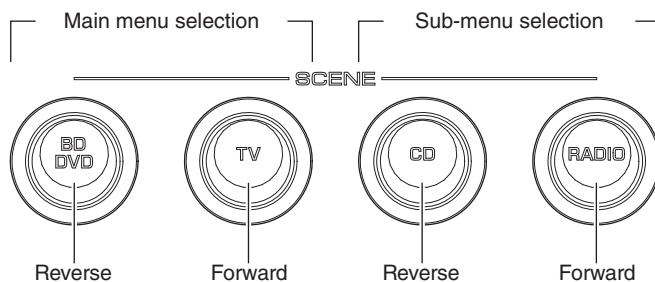
### Main menu selection

Select the main menu using "SCENE TV" (forward) and "SCENE BD/DVD" (reverse) keys.

### Sub-menu selection

Select the sub-menu using "SCENE RADIO" (forward) and "SCENE CD" (reverse) keys.

#### Keys of this unit



## ● Functions in Self-Diagnostic Function mode

In addition to the self-diagnostic function menu items, functions as listed below are available.

- Power ON/OFF
- Master volume
- Muting
- Input selection
- Zone control

\* Functions related to the tuner and the set menu are not available.

## ● Initial settings when Self-Diagnostic Function started

The following initial settings are used when starting self-diagnostic function.

When self-diagnostic function is canceled, these settings are restored to those before starting self-diagnostic function.

- Master volume: -20 dB / Zone volume: +2.5dB
- Input: HDMI1 / Zone input: AUDIO1
- Main menu: A1-1. DSP MARGIN
- Speaker setting: LARGE, Bass out to SWFR (All channels)
- HDMI Control: Off
- Zone 2: On



## ● Details of Self-Diagnostic Function menu

### A1. DSP AUDIO

This menu is used to check audio signal route via DSP.

#### A1-1. DSP MARGIN

The audio signal is output including the head margin via DSP.

\* When input source is stereo, signal is assigned as below.

Front L: Front L, Center, Surround L, Surround Back L, Presence L  
 Front R: Front R, Surround R, Surround Back R, Presence R  
 Front L +10 dB: Subwoofer

```
A1 1
DSP MARGIN
```

#### A1-2. DSP NON MARGIN

The SUBWOOFER signal is output including the head margin via DSP.

The audio signal other than SUBWOOFER is output without including the head margin via DSP.

```
A1 2
DSP NON MARGIN
```

#### A1-3. INVALID ITEM

Not for service.

```
A1 3
INVALID ITEM
```

#### A1-4. DSP FULL CENTER

The audio signal is output to only CENTER channel in digital full bit without including the head margin.

```
A1 4
DSP FULL C
```

#### A1-5. DSP FULL SURROUND

The audio signal is output to only SURROUND L/R channels in digital full bit without including the head margin.

```
A1 5
DSP FULL SUR
```

**A1-6. DSP FULL SURROUND BACK**

The audio signal is output to only SURROUND BACK L/R channels in digital full bit without including the head margin.

```
A1 6
DSP FULL SB
```

**A1-7. DSP FULL SUBWOOFER**

The audio signal is output to only SUBWOOFER channels in digital full bit without including the head margin.

```
A1 7
DSP FULL SW
```

**A2. DIRECT AUDIO**

This menu is used to check audio signal route of DIRECT mode.

**A2-1. DIRECT VH**

The analog input audio signal is output to FRONT L/R in PURE DIRECT mode.

VH: Voltage High, RY101 on MAIN P.C.B.: Off

```
A2 1
DIRECT :VH
```

INPUT: AV5 ANALOG

SPEAKER OUT: 1 kHz, SUBWOOFER OUTPUT: 50 Hz

Input level	Volume	SPEAKER OUTPUT					SUBWOOFER OUTPUT
		FRONT L/R	CENTER	SURROUND L/R	SURROUND BACK L/R	PRESENCE/ ZONE2	
Both ch, -20 dBm	+6.5 dB	+13.0 dBm	- ∞	- ∞	- ∞	- ∞	- ∞

**A2-2. DIRECT VL**

The analog input audio signal is output to FRONT L/R in PURE DIRECT mode.

VL: Voltage Low, RY101 on MAIN P.C.B.: On

```
A2 2
DIRECT :VL
```

INPUT: AV5 ANALOG

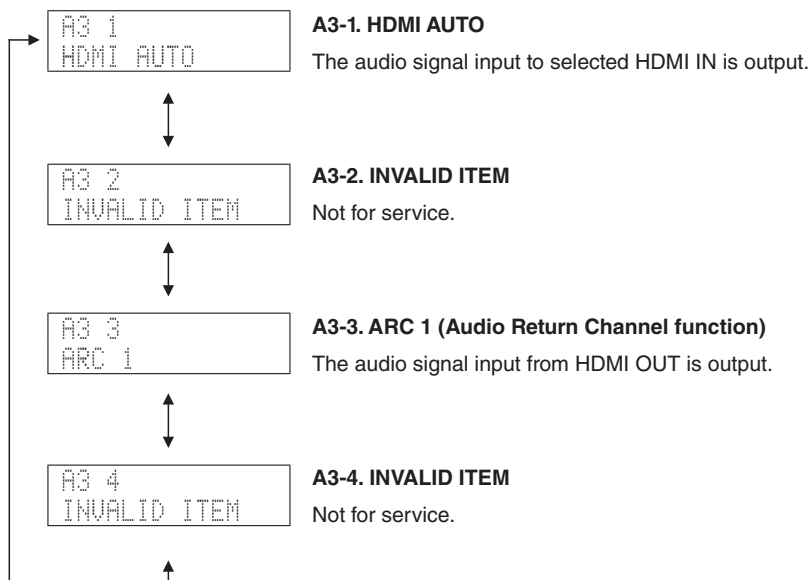
SPEAKER OUT: 1 kHz, SUBWOOFER OUTPUT: 50 Hz

Input level	Volume	SPEAKER OUTPUT					SUBWOOFER OUTPUT
		FRONT L/R	CENTER	SURROUND L/R	SURROUND BACK L/R	PRESENCE/ ZONE2	
Both ch, -20 dBm	+6.5 dB	+13.0 dBm	- ∞	- ∞	- ∞	- ∞	- ∞

## A3. HDMI AUDIO

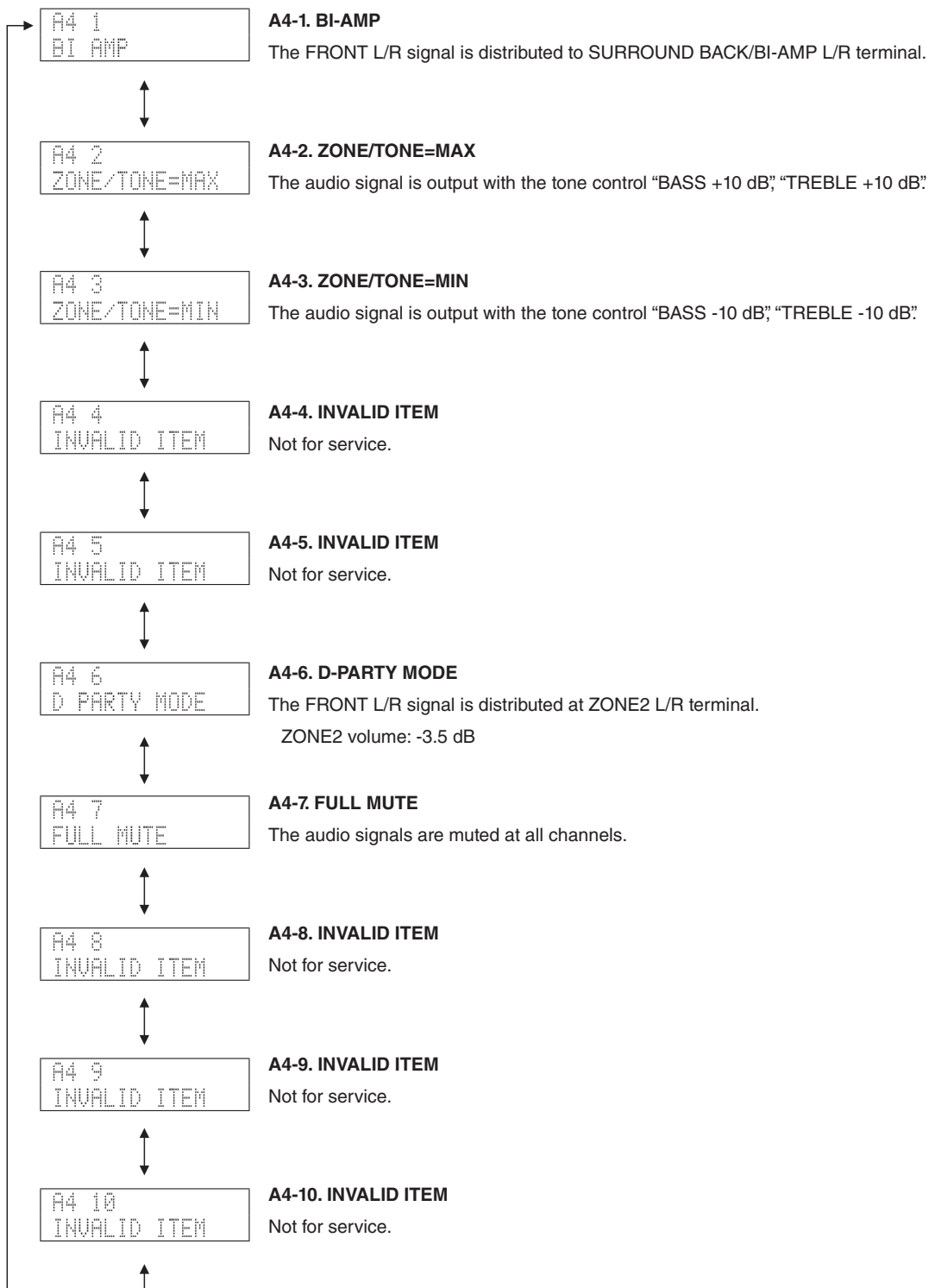
This menu is used to check the route of audio signal input to HDMI IN/OUT.

- \* Before check using "A3-3. ARC 1" menu, be sure to connect a TV monitor equipped with Audio Return Channel function to this unit in advance.



## A4. SPEAKERS SET

This menu is used to check the speaker output.



INPUT: AV5 ANALOG

SPEAKER OUT: 1 kHz, SUBWOOFER OUTPUT: 50 Hz

Sub-memu	Input level	Volume	SPEAKERS OUTPUT					SUB-WOOFER OUTPUT
			FRONT L/R	CENTER	SURROUND L/R	SURROUND BACK L/R	PRESENCE/ ZONE2	
A4-1. BI-AMP	Both ch, -20 dBm	+6.5 dB	+13.0 dBm	+13.0 dBm	+13.0 dBm	+13.0 dBm	- ∞	-6.5 dBm
A4-2. ZONE/TONE=MAX	Both ch, -20 dBm	+6.5 dB	+13.0 dBm	+13.0 dBm	+13.0 dBm	- ∞	+13.0 dBm	-6.5 dBm
A4-3. ZONE/TONE=MIN	Both ch, -20 dBm	+6.5 dB	+13.0 dBm	+13.0 dBm	+13.0 dBm	- ∞	+13.0 dBm	-6.5 dBm
A4-4. INVALID ITEM (Not for service)	Both ch, -20 dBm	+6.5 dB	-	-	-	-	-	-
A4-5. INVALID ITEM (Not for service)	Both ch, -20 dBm	+6.5 dB	-	-	-	-	-	-
A4-6. D-PARTY MODE	Both ch, -20 dBm	+6.5 dB	+13.0 dBm	+13.0 dBm	+13.0 dBm	- ∞	+13.0 dBm	-6.5 dBm
A4-7. FULL MUTE	Both ch, -20 dBm	+6.5 dB	- ∞	- ∞	- ∞	- ∞	- ∞	- ∞
A4-8. INVALID ITEM (Not for service)	Both ch, -20 dBm	+6.5 dB	-	-	-	-	-	-
A4-9. INVALID ITEM (Not for service)	Both ch, -20 dBm	+6.5 dB	-	-	-	-	-	-
A4-10. INVALID ITEM (Not for service)	Both ch, -20 dBm	+6.5 dB	-	-	-	-	-	-

## A5. MULTI CHANNEL INPUT

Not for service.



## A6. MIC CHECK

### A6-1. MIC ROUTE CHECK

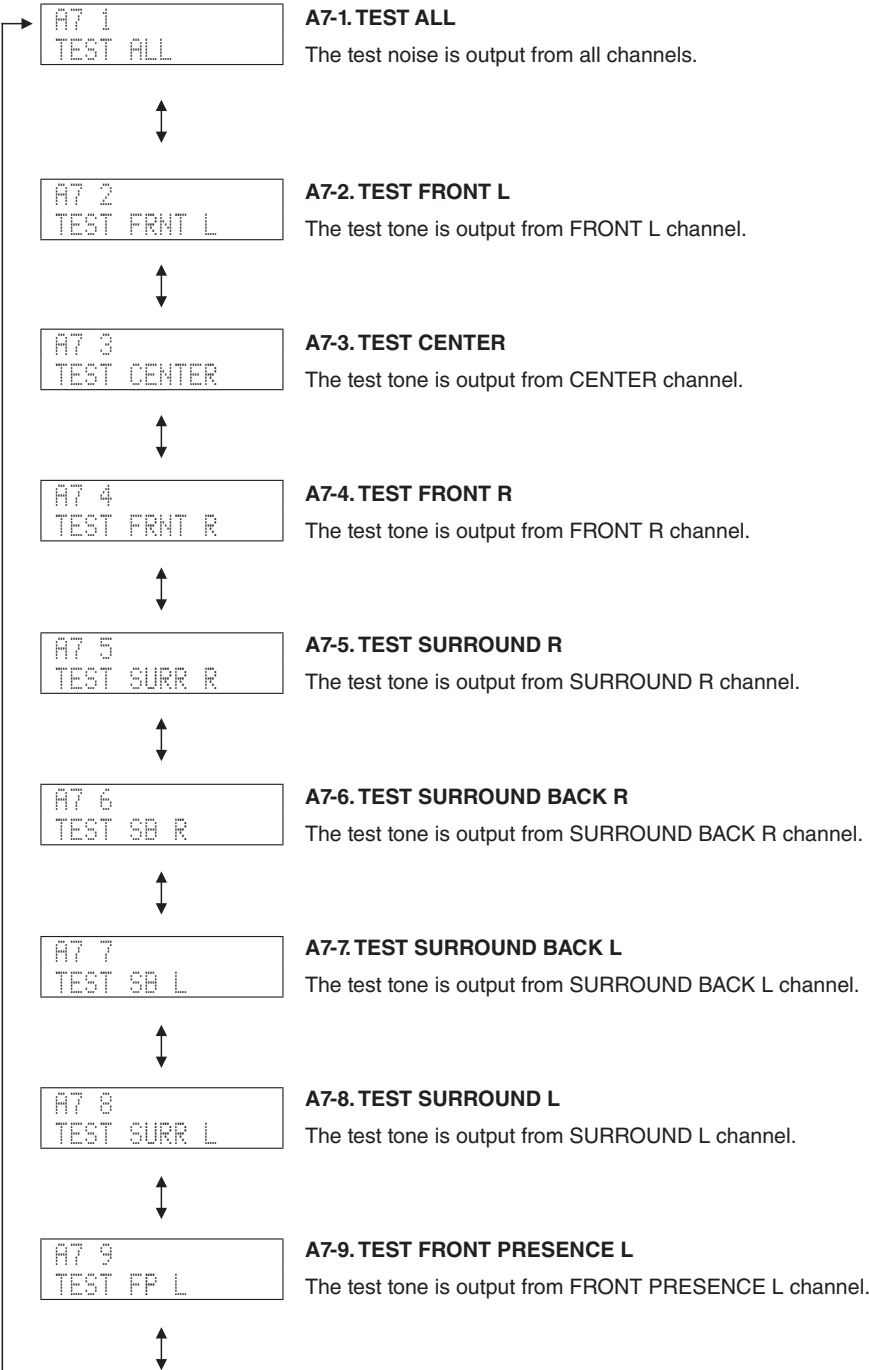
The signals input through the YPAO microphone are output to FRONT L and FRONT R channels via A/D-D/A.

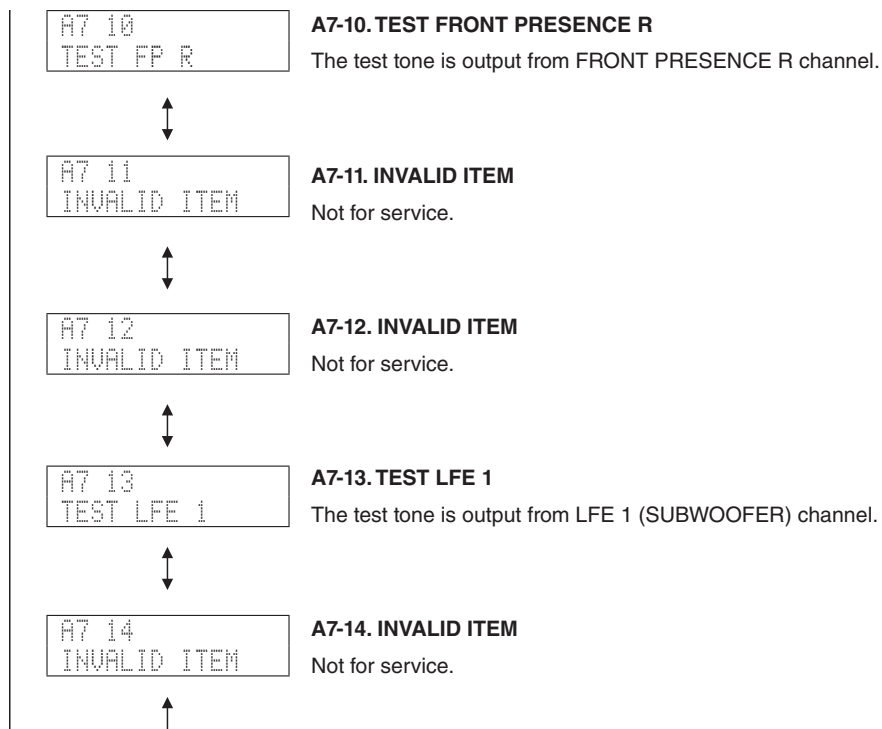


A7. MANUAL TEST

The built-in noise generator of DSP outputs the test noise or test tone through the channels specified by using the sub-menu.

	Test noise	Test tone
for LFE	30 Hz to 80 Hz pink noise	50 Hz sine wave
for other than LFE	500 Hz to 2 kHz pink noise	1 kHz sine wave





## D1. FL CHECK

This menu is used to check the FL display.

### FL display

#### D1-1. INITIAL DISPLAY



#### D1-2. ALL SEGMENT OFF

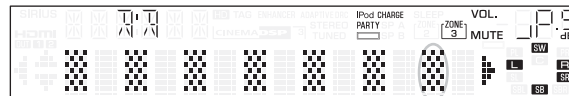


#### D1-3. ALL SEGMENT ON

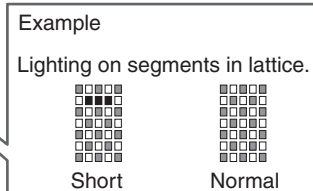
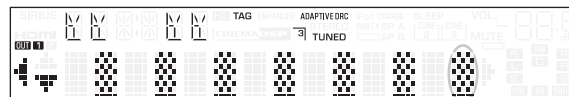


\* After check, change to next sub-menu at once.

#### D1-4. CHECK PATTERN 1



#### D1-5. CHECK PATTERN 2



Segment conditions of the FL tube is checked by turning ON and OFF all segments.

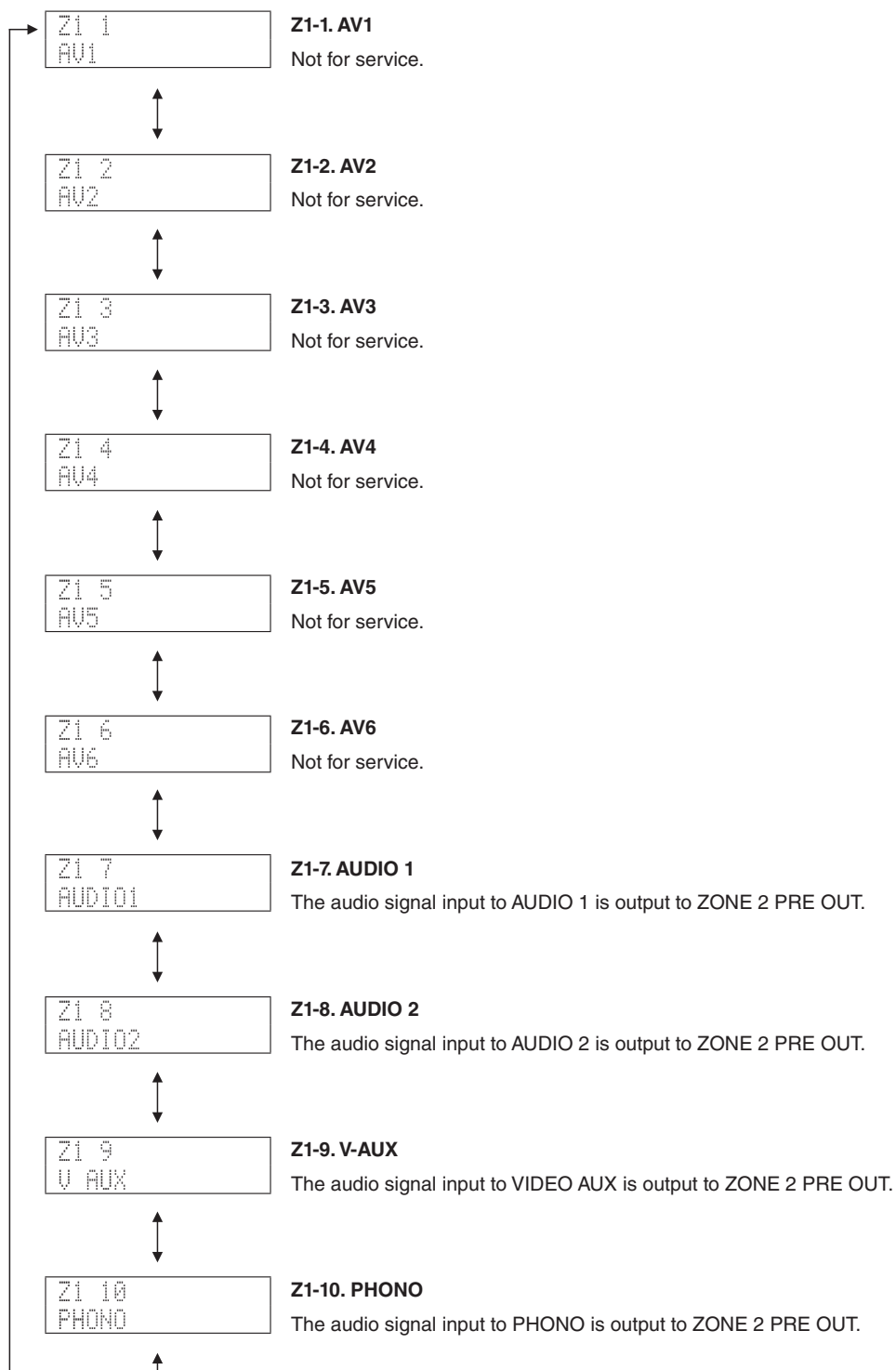
Next, a short between segments next to each other is checked by turning ON and OFF all segments alternately (in lattice).

(In the above example, the segments in the second row from the top are shorted.)



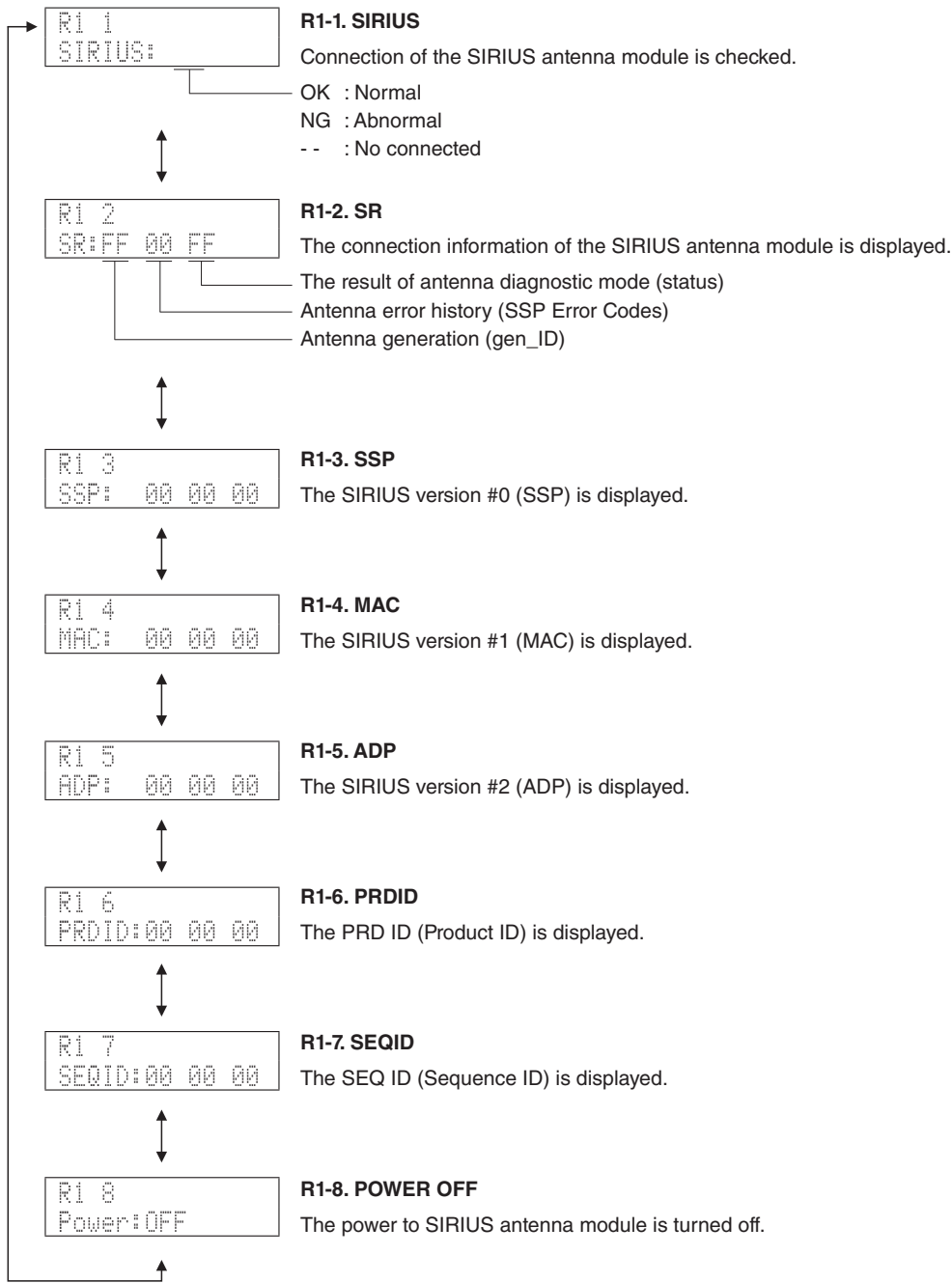
## Z1. ZONE TEST

This menu is used to check audio signal route to ZONE 2 PRE OUT.



R1. SIRIUS (U model)

The SIRIUS information are displayed.



RX-V671/HTR-6064/  
RX-A710

## U1. iPod

This menu is used to check the DOCK jack/iPod authentication IC without connecting the iPod itself.

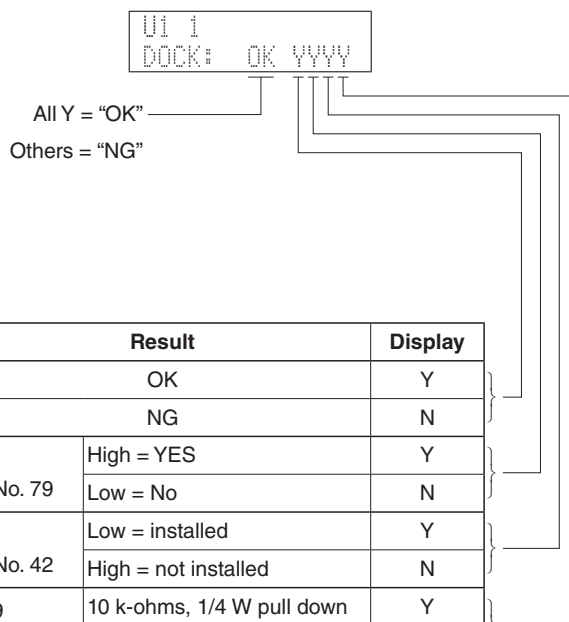
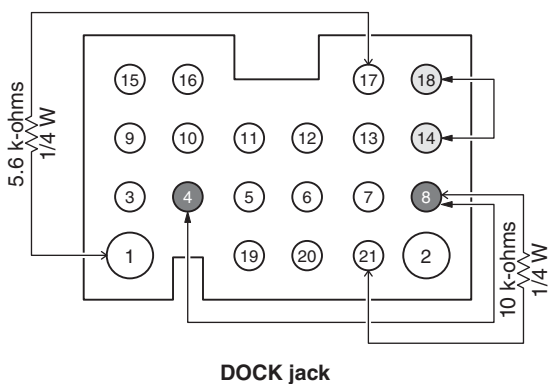
### U1-1. DOCK CHECK

With the power turned off, short the pins of the DOCK jack as shown in the figure below.

Start up the self-diagnostic function and select this menu.

The check result is displayed according to the following display specifications.

**Note)** Be sure to return the shorted pins to their original condition after executing this test.



Shorted pins	Check item	Result		Display
14 – 18	UART loop back test	OK		Y
		NG		N
1 – 17 (5.6 k-ohms, 1/4W)	DK1_AP (iPod accessory power) detection	IC81 pin No. 79	High = YES	Y
			Low = No	N
4 – 8	DK1_N_IPDET (iPod installation to DOCK) detection	IC81 pin No. 42	Low = installed	Y
			High = not installed	N
8 – 21 (10 k-ohms, 1/4W)	DK1_ID (DOCK ID) detection	IC89 pin No. 13	10 k-ohms, 1/4 W pull down	Y
			Other	N

**U2. USB**

This menu is used to check audio signal route of USB.

**U2-1. BF (NETWORK microprocessor) TEST 1kHz**

The built-in noise generator of BF (IC901 on DIGITAL P.C.B.) outputs the 1 kHz test tone.

Output: From Front L/R, Center, Surround L/R, Surround Back L/R

```
U2 1
BF TEST 1k
```

**U2-2. BF (NETWORK microprocessor) TEST 20Hz**

Not for service.

```
U2 2
BF TEST 20Hz
```

**U2-3. BF (NETWORK microprocessor) TEST 20kHz**

Not for service.

```
U2 3
BF TEST 20k
```

**U2-4. USB FRONT 1 TRACK**

The 1st music file stored in the USB storage device connected to the USB port is reproduced.

\* Copy 2 or more music files from PC to the root folder of the USB storage device in advance.

```
U2 4
USB_F 1 TRACK
```

**U2-5. USB FRONT 2 TRACK**

The 2nd music file stored in the USB storage device connected to the USB port is reproduced.

```
U2 5
USB_F 2 TRACK
```

## N1. NETWORK

This menu is used to check signal route of NETWORK.

Connect between NETWORK port of this unit and LAN port of broadband with a network cable.

- \* When the network condition varies while sub-menu is displayed (e.g., the network is deactivated once), the correct result will not be displayed.

In that case, once turn off the power to this unit, then start up the self-diagnostic function again and select this menu.

### N1-1. IP ADDRESS CHECK

IP address obtained is checked.

```
N1 1
IP AD CHK:OK
```

OK: Connected (IP address obtained)

NG: No traffic / Disconnected

### N1-2. MAC ADDRESS CHECK

MAC address information is checked.

```
N1 2
MAC AD CHK:OK
```

OK: Normal

NG: Unwritten

### N1-3. LINE NOISE 10

Not for service.

```
N1 3
LINE NOISE 10
```

### N1-4. LINE NOISE 100

Not for service.

```
N1 4
LINE NOISE 100
```

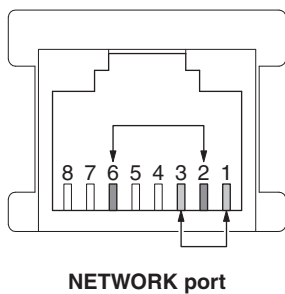
**N1-5. EXT TEST**

Transmission/reception of the NETWORK connector is checked.

With the power turned off, short the pins of the NETWORK port as shown in the figure below.

Start up the self-diagnostic function and select this menu.

**Note) Be sure to return the shorted pins to their original condition after executing this test.**



```
N1 5
EXT TEST:OK
```

OK: Normal  
NG: Abnormal  
--: Checking

**N1-6. MAC ADDRESS**

The MAC address is displayed.

```
N1 6
00A0DExxxxxx
```

**C1. DIGITAL P.C.B. CHECK**

This menu is used to check the communication and bus line connection between devices on DIGITAL P.C.B.

**C1-1. ALL**

The synthetic judgment result of sub-menu C1-2 to C1-16 is displayed.

OK : No error detected  
NG : An error is detected

```
C1 1
ALL:OK Ext. JIG
```

When the sub-menu C1-10 is NG, "Ext. JIG" is displayed.

**C1-2. BUS FLASH ROM**

Reading/writing FLASH ROM (IC904) are checked.

OK : No error detected  
NG : An error is detected

```
C1 2
BUS_FLASH:OK
```

**C1-3. BUS FPGA**

Communication and bus line connection between microprocessor (IC81) and FPGA (IC51) are checked.

OK : No error detected  
NG : An error is detected

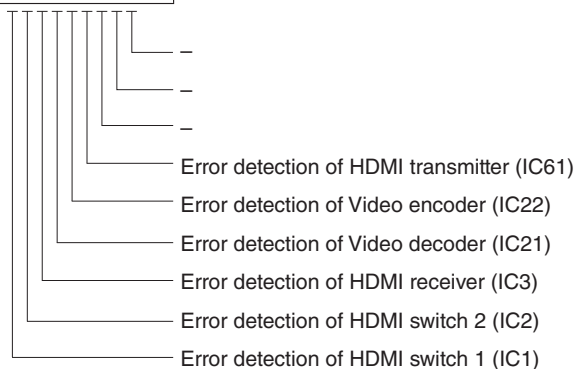
```
C1 3
BUS_FPGA:OK
```

**C1-4. I2C**

The I2C (Inter integrated route) bus line connection is checked.

0 : No error detected  
1 : An error is detected

```
C1 4
I2C:000000
```

**C1-5. FPGA RAM**

Reading/writing SDRAM (IC52) are checked.

OK : No error detected  
NG : An error is detected

```
C1 5
FPGA_RAM:OK
```

**C1-6. BUS DIR**

Communication and bus line connection between microprocessor (IC81) and DIR (IC924) are checked.

OK : No error detected  
NG : An error is detected

```
C1 6
DIR_BUS:OK
```

**C1-7. BUS DSP1**

Communication and bus line connection between microprocessor (IC81) and DSP1 (IC921) are checked.

OK : No error detected  
NG : An error is detected

```
C1 7
DSP1 BUS:OK
```

**C1-8. EEPROM**

Reading EEPROM (IC83) is checked.

OK : No error detected  
NG : An error is detected

```
C1 8
EEPROM:OK
```

**C1-9. INVALID ITEM**

Not for service.

```
C1 9
INVALID ITEM
```

**C1-10. LINK CHECK**

LAN cable connection is checked.

Connect between NETWORK port of this unit and LAN port of broadband router with a network cable.

- \* When the network condition varies while sub-menu is displayed (e.g., the network is deactivated once), the correct result will not be displayed. In that case, once turn off the power to this unit, then start up the self-diagnostic function again and select this menu.

```
C1 10
LINK CHK:OK
```

OK: Normal  
NG: Disconnected  
--: Checking

**C1-11. PHY TEST**

Communication and bus line connection between PHY (IC906) and BF (NETWORK microprocessor, IC901) are checked.

```
C1 11
PHY TEST:OK
```

OK: No error detected  
NG: An error is detected  
--: Checking



**C1-12. I2C EEPROM**

Communication and bus line connection between microprocessor (IC81) and EEPROM (IC83) are checked.

```
C1 12
I2C EPROM:OK
```

OK: No error detected  
NG: An error is detected  
--: Checking

**C1-13. BUS RAM**

Communication and bus line connection between RAM (IC902, IC903) and BF (NETWORK microprocessor, IC901) are checked.

```
C1 13
RAM BUS :OK
```

OK: No error detected  
NG: An error is detected  
--: Checking

**C1-14. SYNC SERIAL**

Communication and bus line connection between microprocessor (IC81) and BF (NETWORK microprocessor, IC901) are checked.

```
C1 14
SYNC SERIAL:OK
```

OK: No error detected  
NG: An error is detected  
--: Checking

**C1-15. CLOCK GENERATION**

Reading CLOCK IC (IC908) is checked.

```
C1 15
CLOCK GEN :OK
```

OK: No error detected  
NG: An error is detected  
--: Checking

**C1-16. APL ID CHECK**

APPLE coprocessor (IC908) device ID is checked.

```
C1 16
APL ID:OK
```

OK: No error detected  
NG: An error is detected  
--: Checking

C2.INVALID ITEM

Not for service.

C2 1  
INVALID ITEM

C3.HDMI INFORMATION

This menu is used to display information about HDMI.

C3-1. HDMI MODEL NAME

The model name of this unit written in HDMI module is displayed.

RX-V671  
HTR-6064  
RX-A710

C3 1  
HMN:RX V671

C3-2. HDMI PRODUCT ID

The product ID of this unit written in HDMI module is displayed.

RX-V671 : 315E  
HTR-6064 : 3169  
RX-A710 : 3166

C3 2  
HID:315E

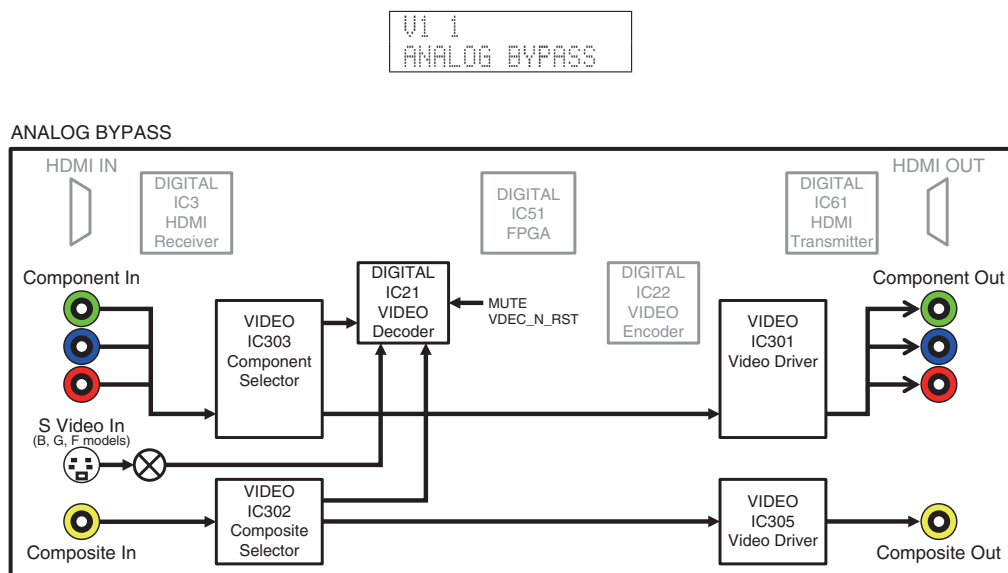
RX-V671/HTR-6064/  
RX-A710

## V1. ANALOG VIDEO CHECK

This menu is used to check the analog video signal route.

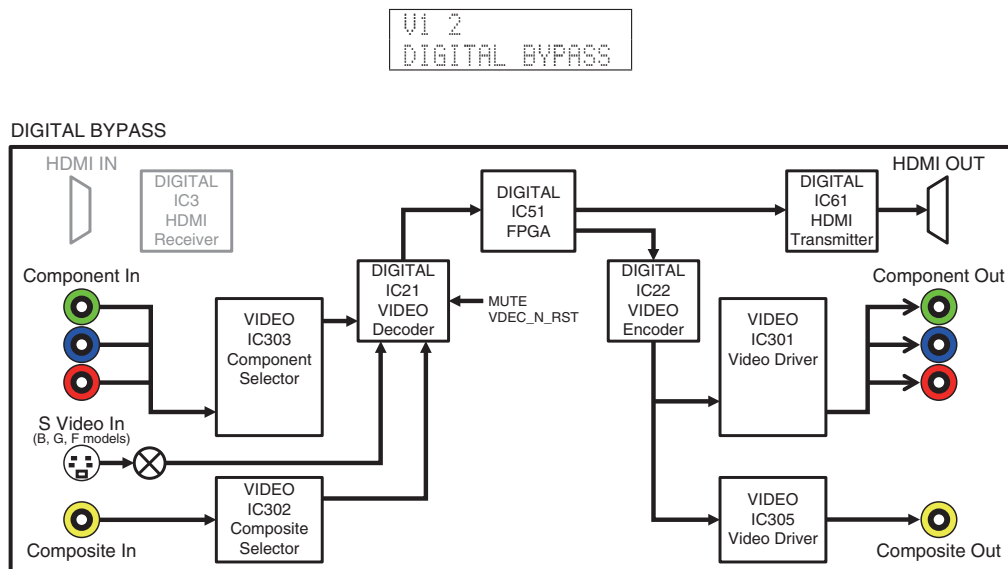
### V1-1. ANALOG BYPASS

The video signal is converted and output as shown below.



### V1-2. DIGITAL BYPASS

The video signal is converted and output as shown below.



### V1-3. INVALID ITEM

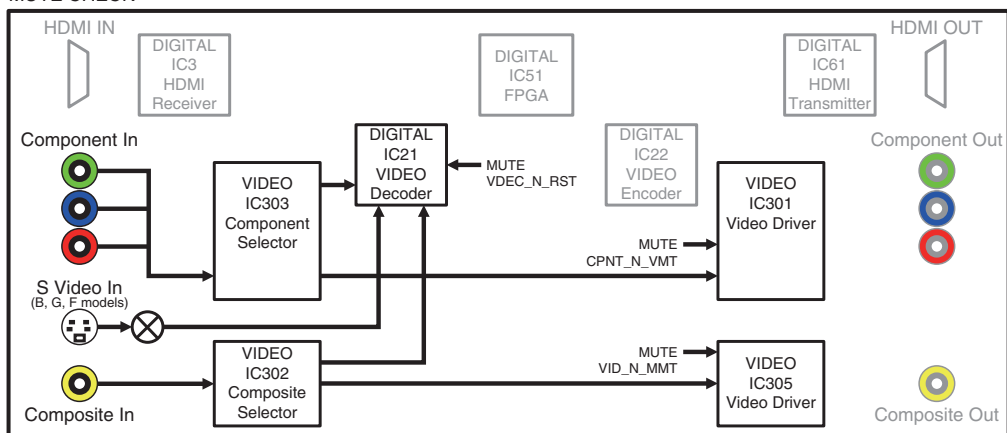
Not for service.

V1 3  
INVALID ITEM

**V1-4. MUTE CHECK**

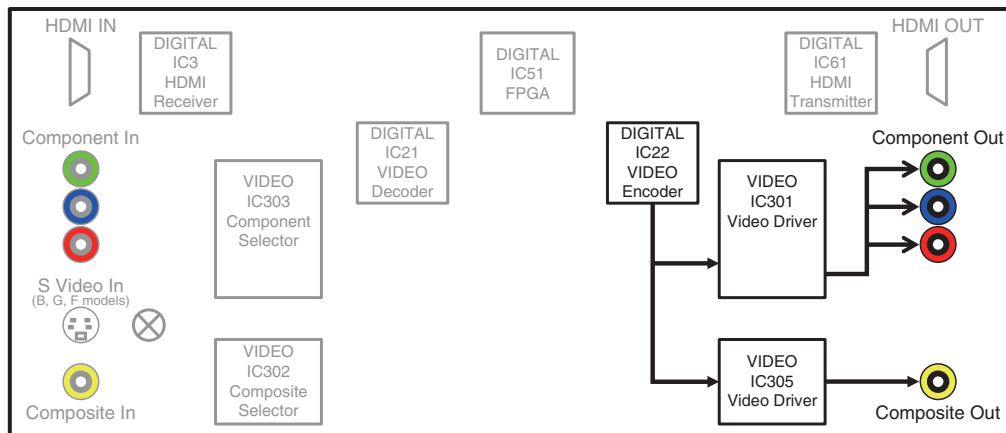
The video signal is muted.

V1 4  
MUTE CHECK

**MUTE CHECK****V1-5. TEST PATTERN**

The test pattern is output from video encoder (IC22 on DIGITAL P.C.B.).

V1 5  
TEST PATTERN

**TEST PATTERN****V1-6. VIDEO INFORMATION**

The information of input analog video signals is displayed.

V1 6  
VID IN:480160

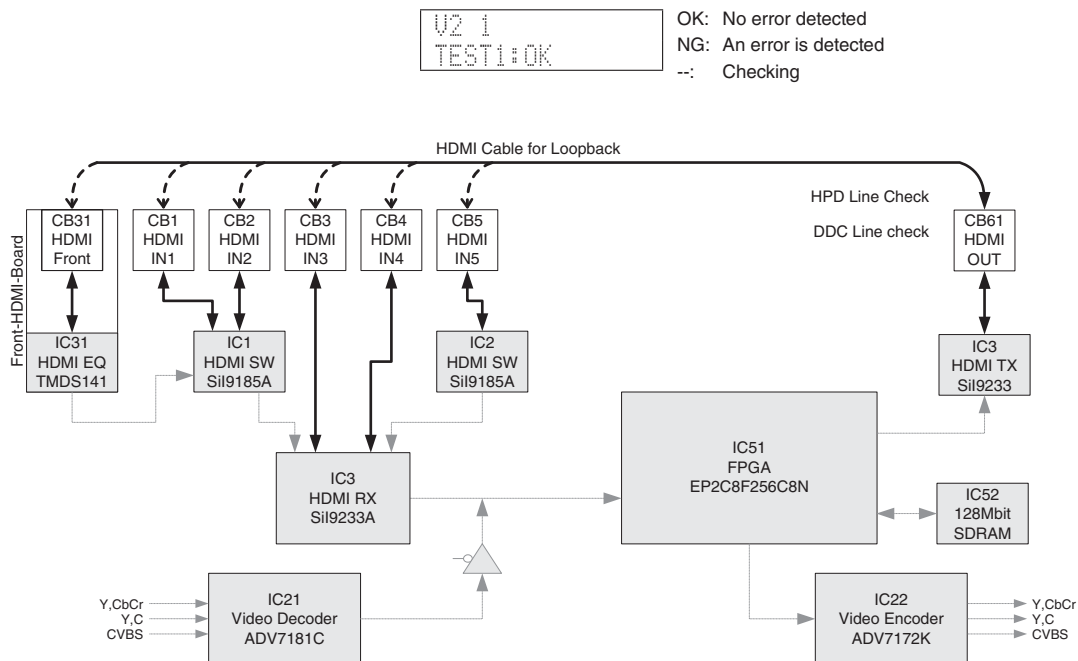
## V2. DIGITAL VIDEO CHECK

This menu is used to check the digital video signal route.

### V2-1. LOOPBACK TEST 1

Execute the test for all HDMI IN jacks by repeating the procedure below.

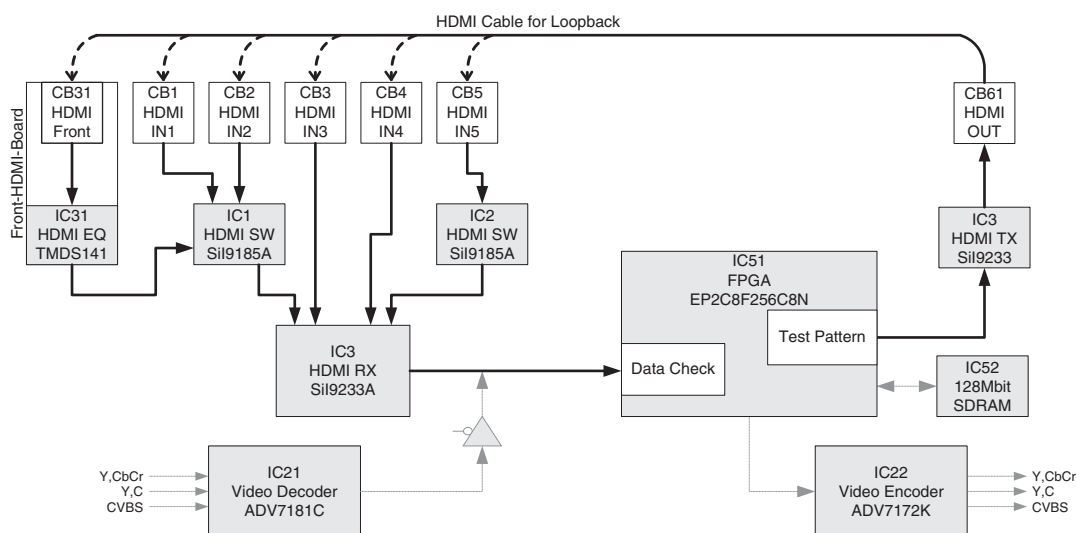
1. Select sub-menu other than V2-1.
2. Connect between any of the HDMI IN jacks and HDMI OUT jack with an HDMI cable.
3. Select V2-1. The test result is displayed in a few seconds.



**V2-2. LOOPBACK TEST 2**

Execute the test for all HDMI IN jacks by repeating the procedure below.

1. Select sub-menu other than V2-2.
2. Connect between any of the HDMI IN jacks and HDMI OUT jack with an HDMI cable.
3. Select the input source corresponding to the connected HDMI IN jack by using "INPUT" knob.
4. Select V2-2. The test result is displayed in a few seconds.

**V2-3. INVALID ITEM**

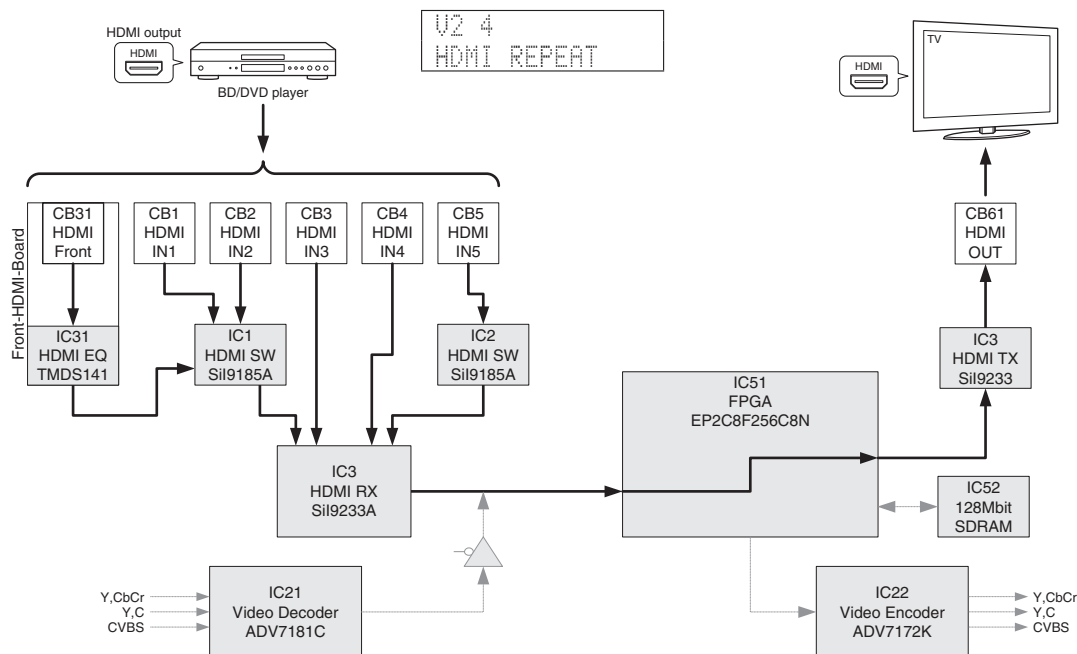
Not for service.

V2 3  
INVALID ITEM

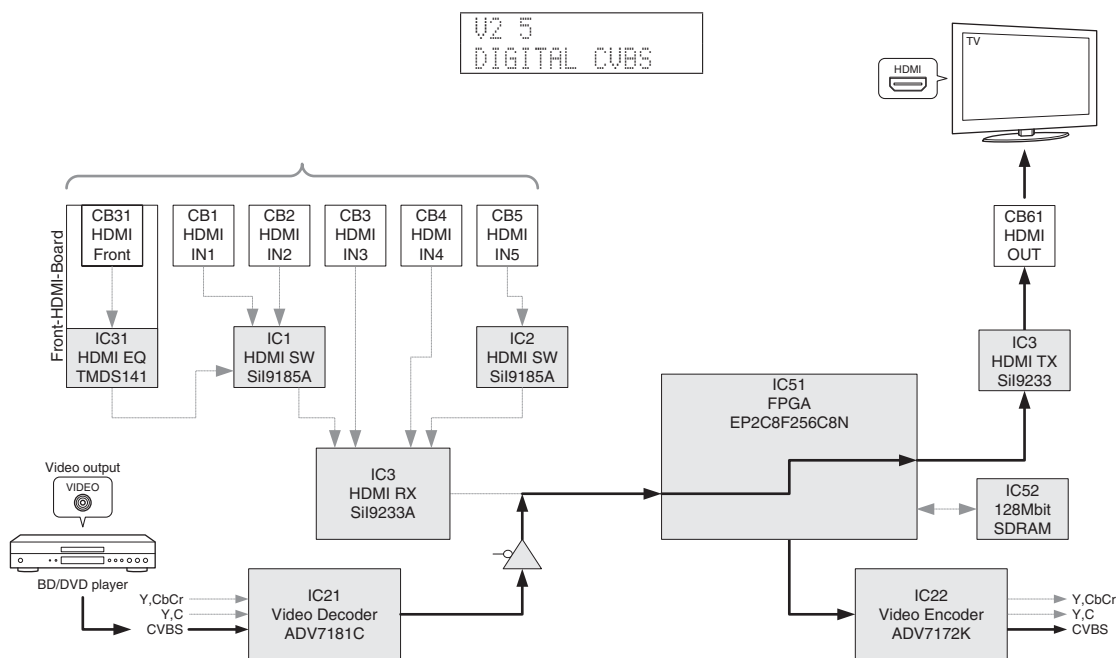
**V2-4. HDMI REPEAT**

- \* Before check using sub-menu V2-4, disconnect the HDMI cable connected between HDMI OUT jack and HDMI IN jack of this unit in advance.

The video/audio signals input to HDMI IN jack are output to HDMI OUT jack.

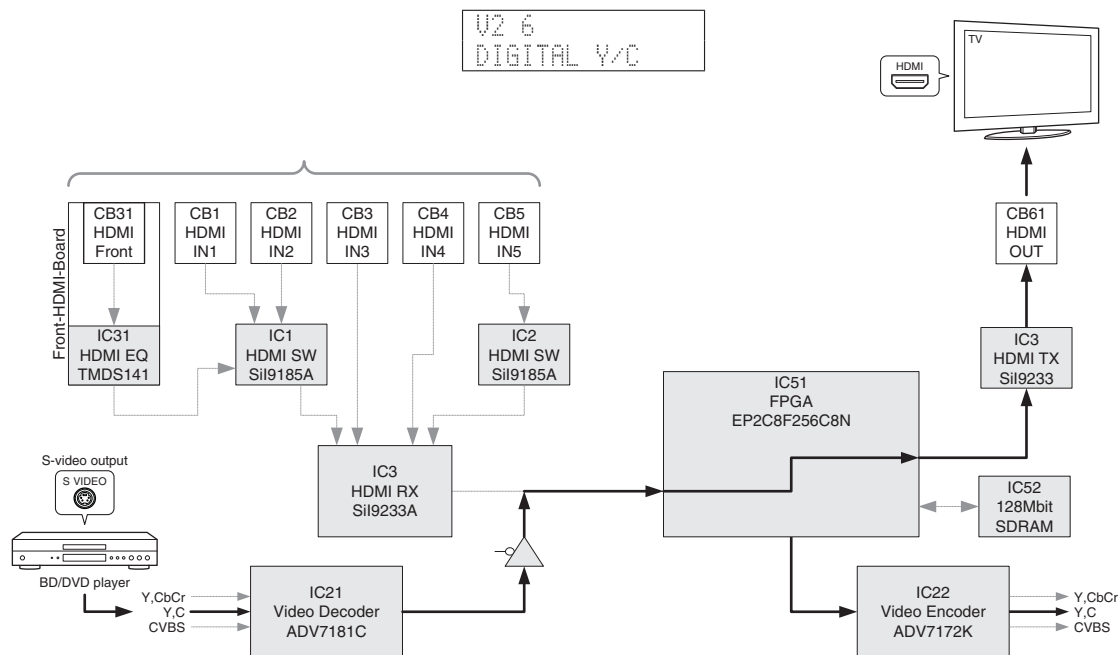
**V2-5. DIGITAL CVBS**

The video (CVBS) signal is converted and output as shown below.

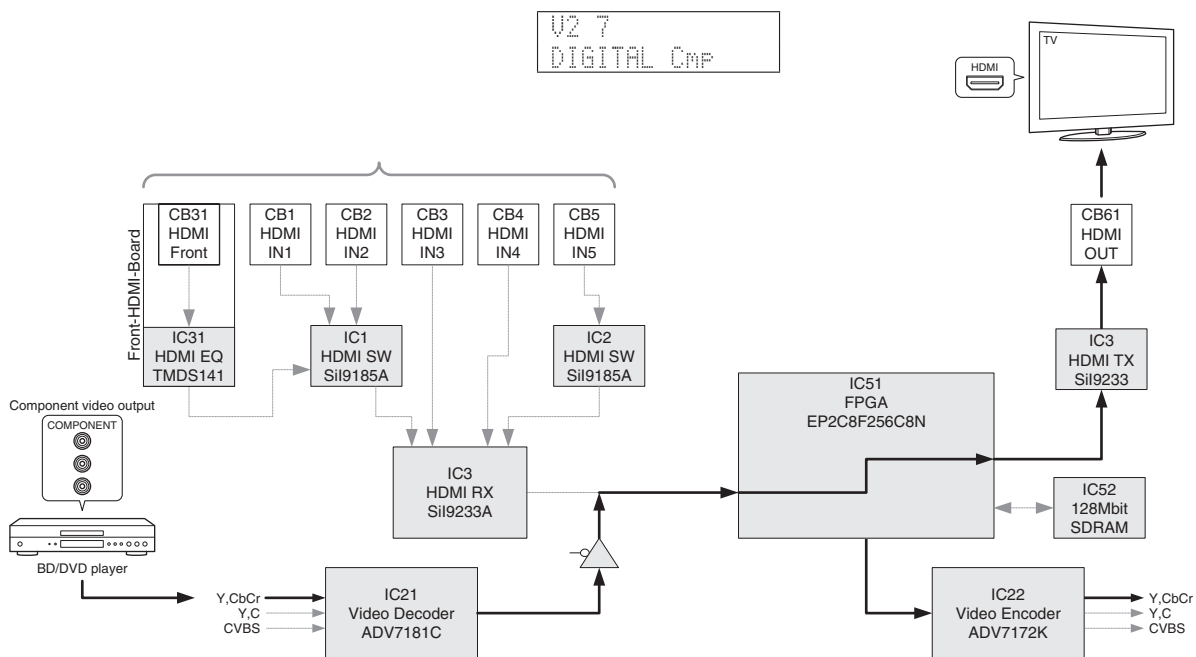


**V2-6. DIGITAL Y/C (B, G, F models)**

The s-video (Y, C) signal is converted and output as shown below.

**V2-7. DIGITAL COMPONENT**

The component video (Y, Cb, Cr) signal is converted and output as shown below.

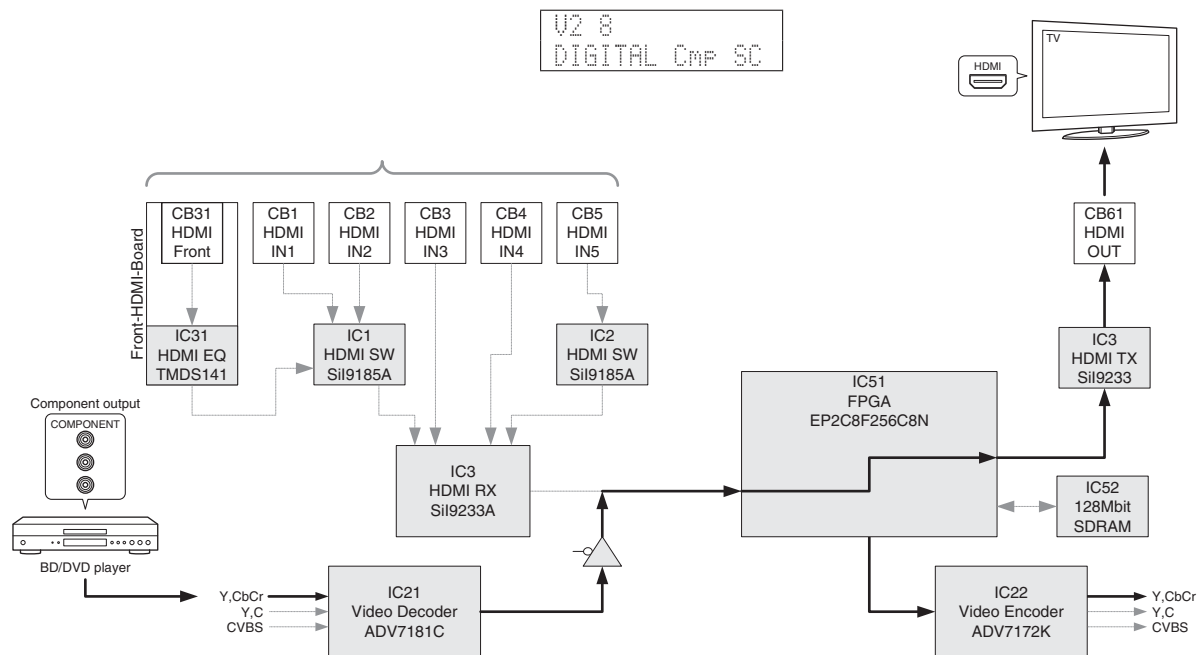




## V2-8. DIGITAL COMPONENT SC

The component video (Y, Cb, Cr) signal is converted and output as shown below.

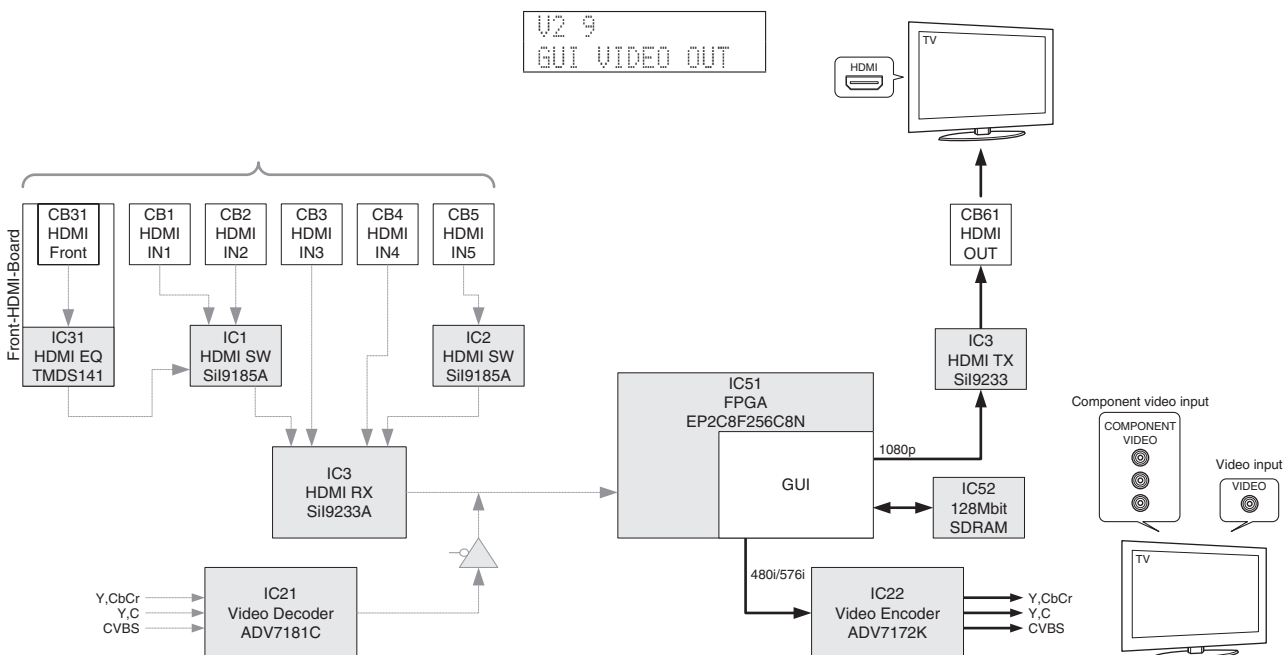
HDMI video output up-scaling: 480i/p, 576i/p only => 1080p



## V2-9. GUI-VIDEO OUT

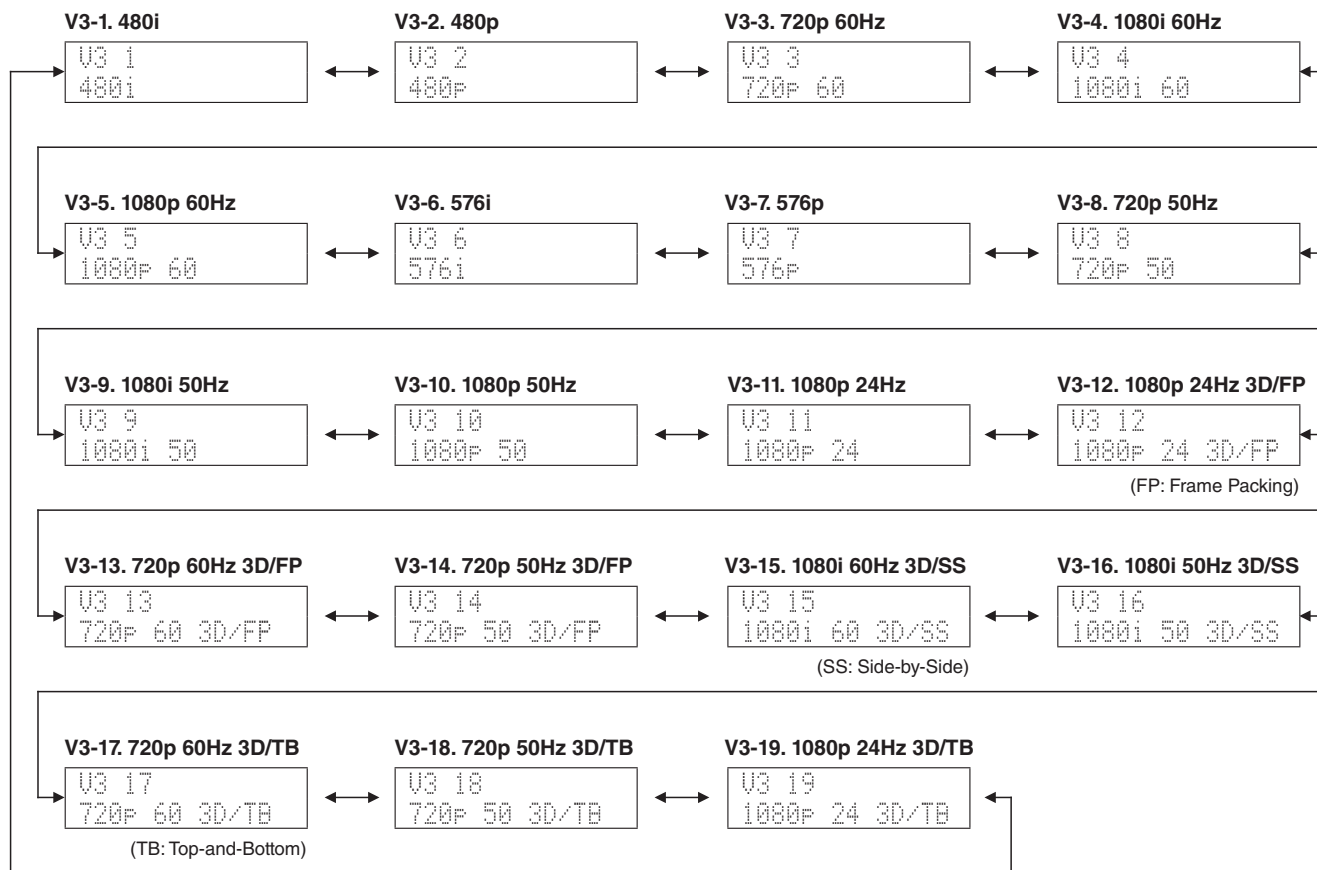
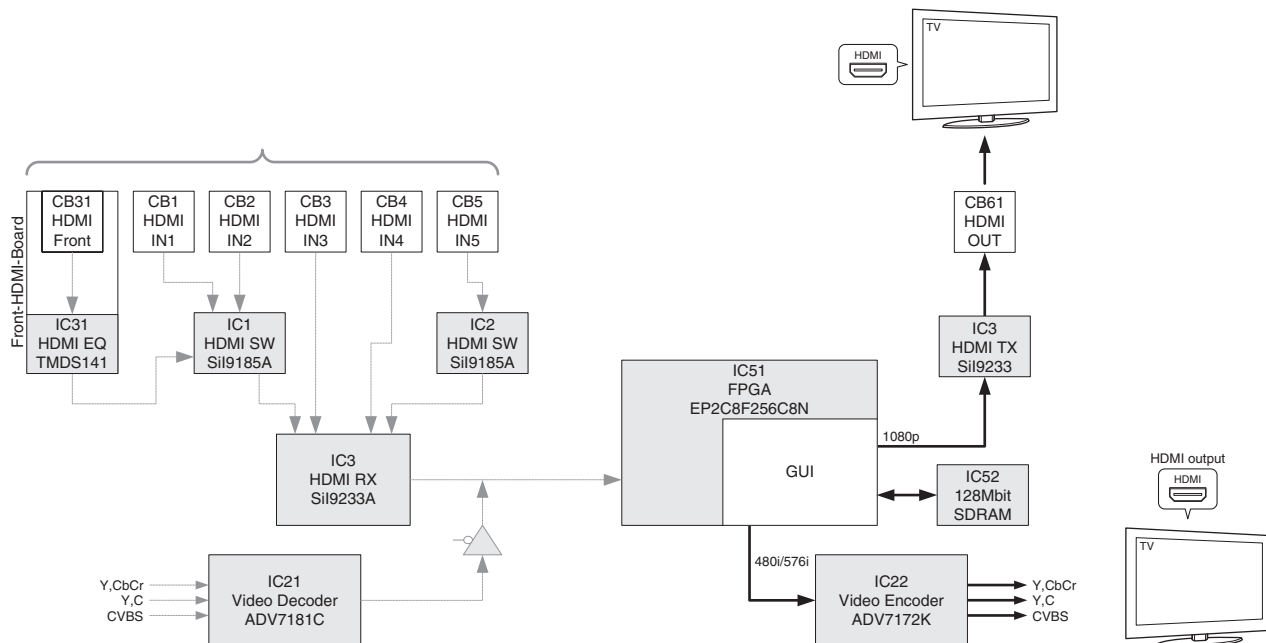
The GUI is output from FPGA (IC51 on DIGITAL P.C.B.).

HDMI output: 1080p only



### V3. TEST PATTERN

The video signal is output to HDMI OUT jack with its resolution converted as shown below.



## P1. SYSTEM MONITOR

This menu is used to display the A/D conversion value of the microprocessor which detects panel keys and protection functions by using the sub-menu.

When "P1-7. KEY1/KEY2" sub-menu is selected, keys become non-operable due to detection of the values of all keys. However, it is possible to advance to the next sub-menu by pressing the "SCENE RADIO" (forward) key or "SCENE CD" (reverse) key on the remote control.

\* Numeric values in the figure are given as reference only.

### P1-1. DC

Power amplifier DC (DC voltage) output is detected.

The voltage at 5 pin (DC\_PRT) of IC89 is displayed.

Normal value: 35 to 68

(Reference voltage: 3.3 V=255)

\* If DC becomes out of the normal value range, the protection function works to turn off the power.

```
P1 1
DC: 51
```

### P1-2. PS1/PS2

Power supply voltage protection detection

The voltage at 2 pin (PS1\_PRT)/1 pin (PS2\_PRT) of IC89 are displayed.

Voltage detects

**PS1:** ACBL, AC12, AC5,  $\pm 7$ , +3.3s, -5VA

**PS2:** -VP, +5T, +5A, +3.3s

Normal value

**PS1:** 33 to 128

**PS2:** 90 to 166 ( $\pm 5$ VA: On)

143 to 220 ( $\pm 5$ VA: Off)

(Reference voltage: 3.3 V=255)

\* If PS1 or PS2 becomes out of the normal value range, the protection function works to turn off the power.

```
P1 2
PS: 80 / 128
```

### P1-3. TM

Temperature of the heatsink is detected.

The voltage at 12 pin (TMH1) of IC89 is displayed.

Normal value: 42 to 255

(Reference voltage: 3.3 V=255)

\* If TM becomes out of the normal value range, the protection function works to turn off the power.

```
P1 3
TM: 109
```

**P1-4. INVALID ITEM**

Not for service.

P1 4  
INVALID ITEM

**P1-5. OUTPUT LEVEL**

Output level of speaker output is detected.

The voltage at 165 pin (AMP\_OLV) of IC89 is displayed.

(Reference voltage: 3.3 V=255)

P1 5  
OUTLVL: 255

**P1-6. LIMITER CONTROL**

Power limiter control is detected.

The voltage at 4 pin (AMP\_LMT) of IC81 is displayed.

(Reference voltage: 3.3 V=255)

P1 6  
LMTCNT: 255

**P1-7. L3 (J model)**

Not for service.

P1 7  
L3: 11

**P1-7. KEY1/KEY2**

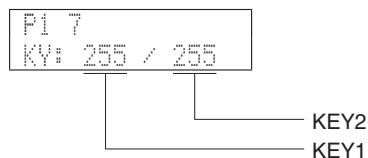
Panel key is detected.

When the A/D conversion value of the panel key becomes out of the specified range, normal operation will not be available.

In that case, check the constant of voltage dividing resistor, solder condition, etc. Refer to table.

- \* When "P1-7. KEY1/KEY2" menu is selected, keys become non-operable due to detection of the values of all keys. However, it is possible to advance to the next sub-menu by pressing the "SCENE RADIO" (forward) key or "SCENE CD" (reverse) key on the remote control.

(Reference voltage: 3.3 V=255)

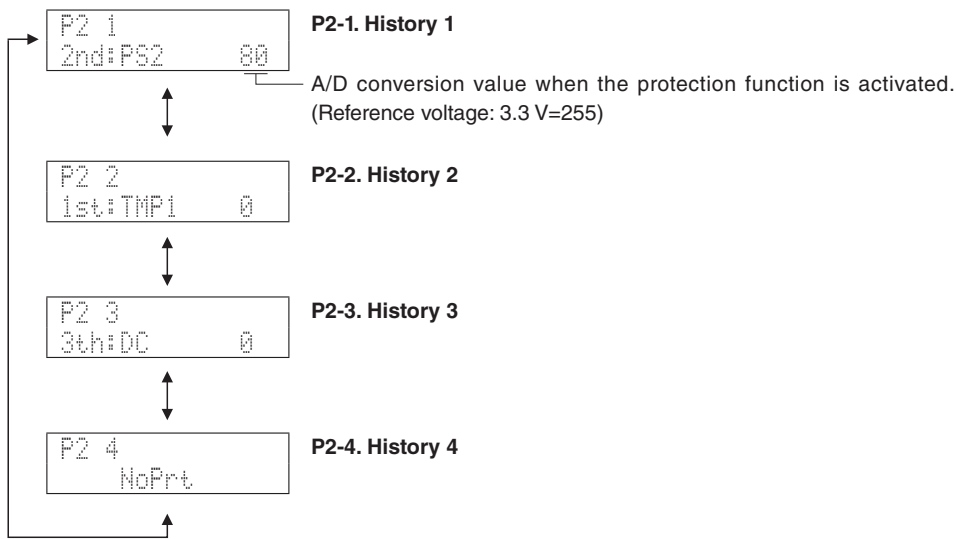


Display	KEY1
0 – 11	RADIO (SCENE4)
12 – 32	CD (SCENE3)
33 – 54	TV (SCENE2)
55 – 75	BD/DVD (SCENE1)
76 – 96	ZONE2 CONTROL
97 – 119	ZONE2 ON/OFF
120 – 142	INPUT >
143 – 172	INPUT <
173 – 202	MAIN ZONE ⏻
203 – 235	TONE CONTROL
255	Key off

Display	KEY2
0 – 11	PURE DIRECT
12 – 32	TUNING >>
33 – 54	TUNING <<
55 – 77	AM
78 – 99	FM
100 – 121	PRESET >
122 – 144	PRESET <
145 – 166	MEMORY
167 – 186	INFO
187 – 205	STRAIGHT
206 – 226	PROGRAM >
227 – 246	PROGRAM <
255	Key off

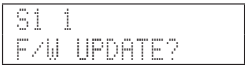
P2. PROTECTION HISTORY

This menu is used to display the history of protection function.  
All history of protection function will be erased by pressing the “STRAIGHT” key.  
\* Numeric values in the figure are given as reference only.



S1. F/W UPDATE

Not for service.

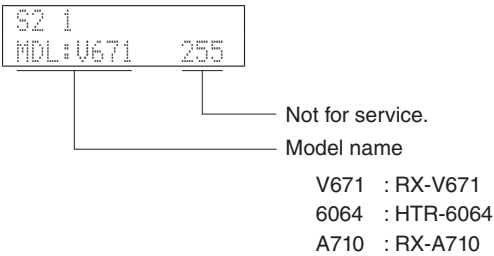


S2. SET INFORMATION

The model name and destination of this unit are displayed.

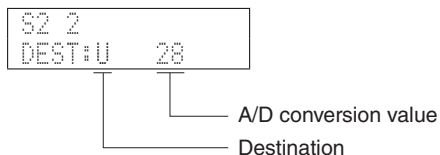
S2-1. MODEL

The model name of this unit is displayed.



**S2-2. DESTINATION**

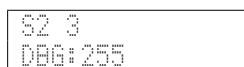
The destination of this unit is displayed.



Destination	J	U	C	R, S	T	K	A	B, G, F	L
A/D conversion value (3.3 V=255)	0 – 12	13 – 39	40 – 67	68 – 92	93 – 115	116 – 140	141 – 169	199 – 221	222 – 244

**S2-3. DEBUG**

Not for service.

**S3. FACTORY PRESET**

This menu is used to reserve/inhibit initialization of the back-up IC (EEPROM: IC83 on DIGITAL P.C.B.).

**S3-1. PRESET INHIBIT** (Initialization inhibited)

Initialization of the back-up IC is not executed. Select this sub-menu to protect the values set by the user.

**S3-1. PRESET RESERVED** (Initialization reserved)

Initialization of the back-up IC is reserved. (Actual initialization is executed the next time the power is turned on.) To reset to the original factory settings or to reset the backup IC, select this sub-menu and press the “MAIN ZONE ⏻” key to turn off the power.

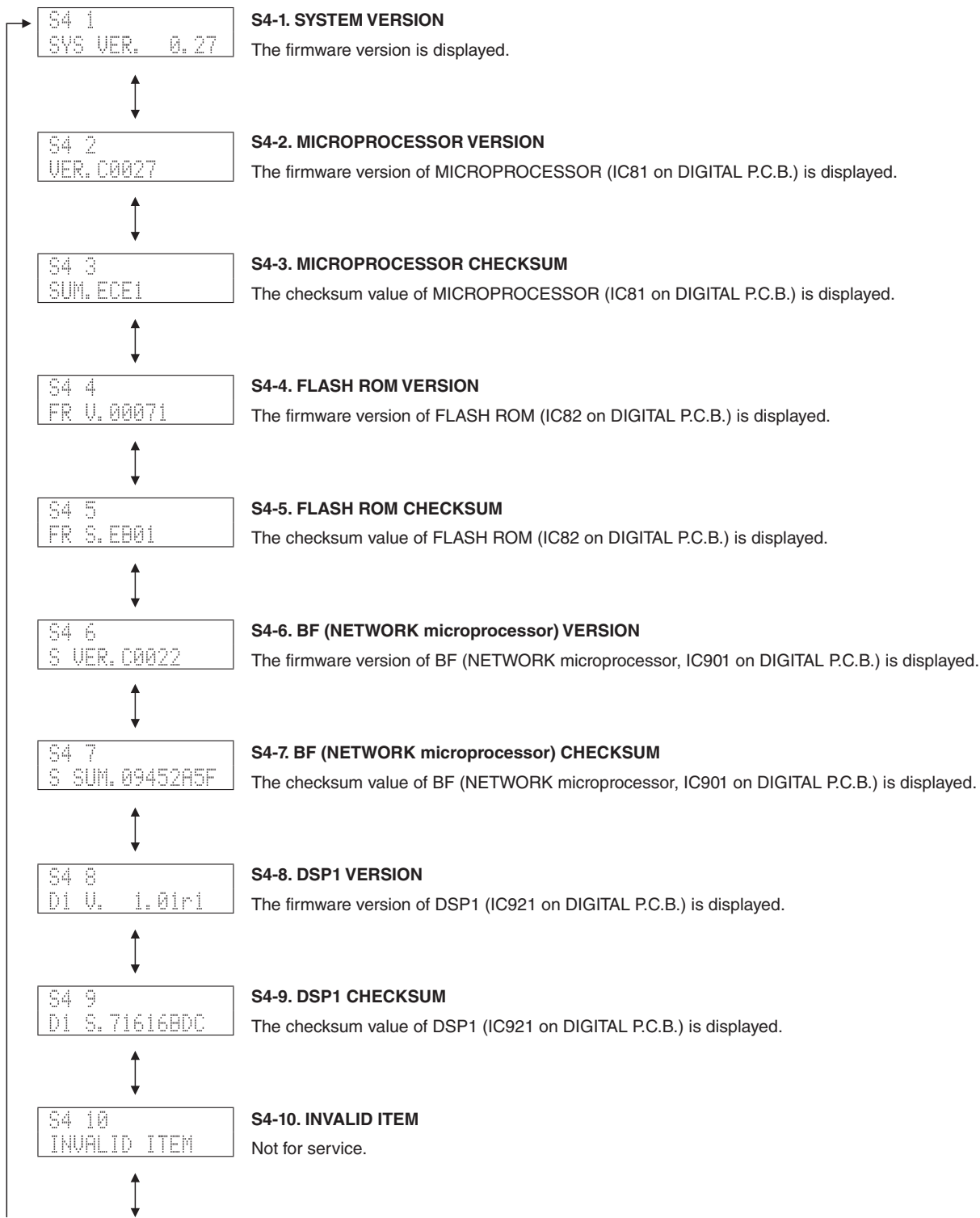
**CAUTION:** Before setting to the PRESET RESERVED, write down the existing preset memory content of the tuner. (This is because setting to the PRESET RESERVED will cause the user memory content to be erased.)

S4. ROM VERSION/CHECKSUM

The firmware version and checksum values are displayed.

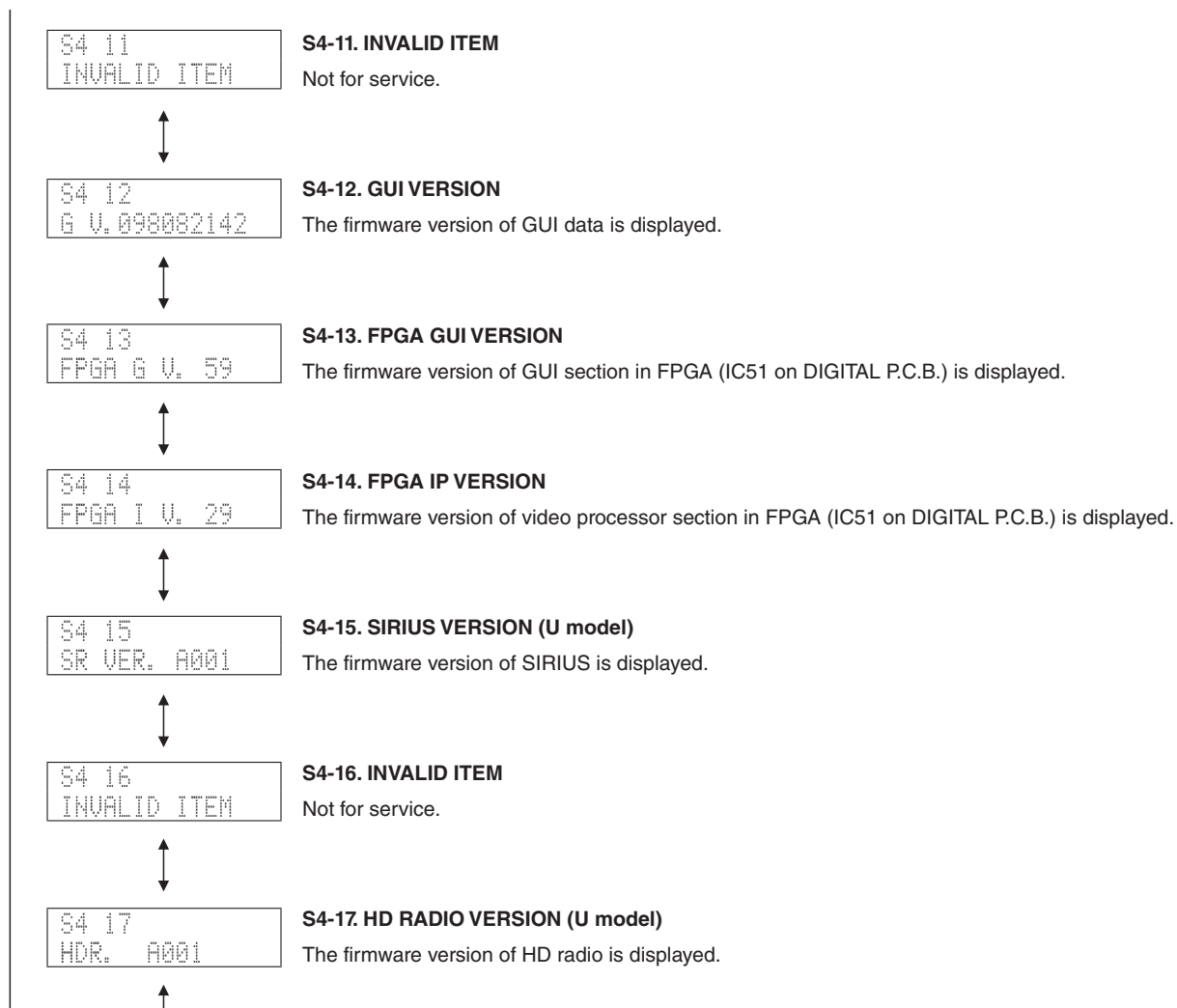
The checksum is obtained by adding the data at every 8-bit and expressing the result as a 4-figure hexadecimal notation.

\* Numeric values in the figure are given as reference only.



RX-V671/HTR-6064/  
RX-A710





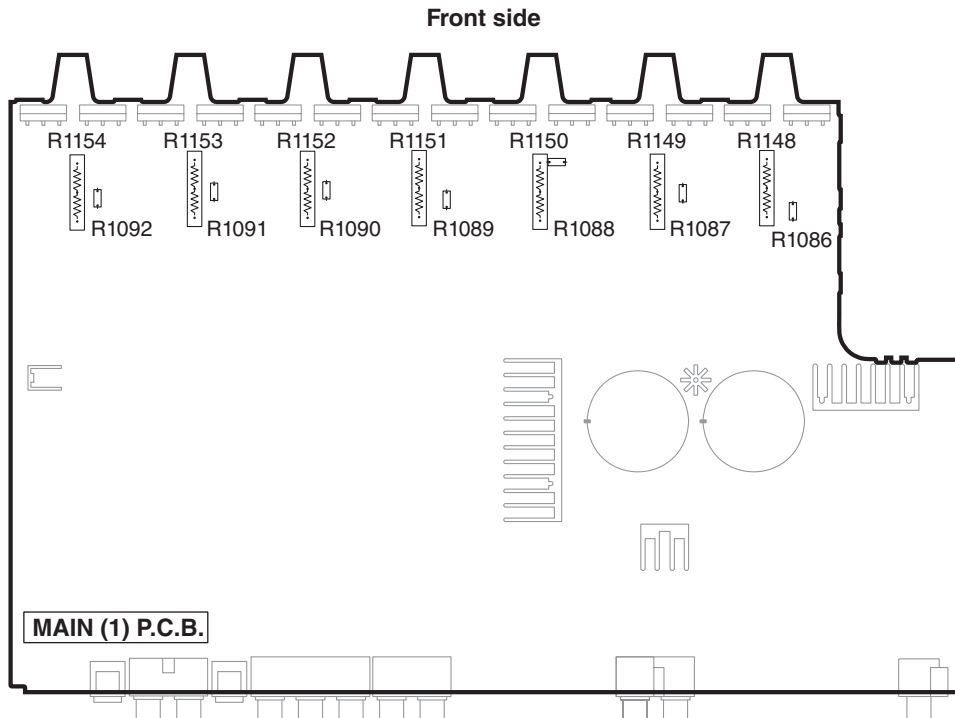
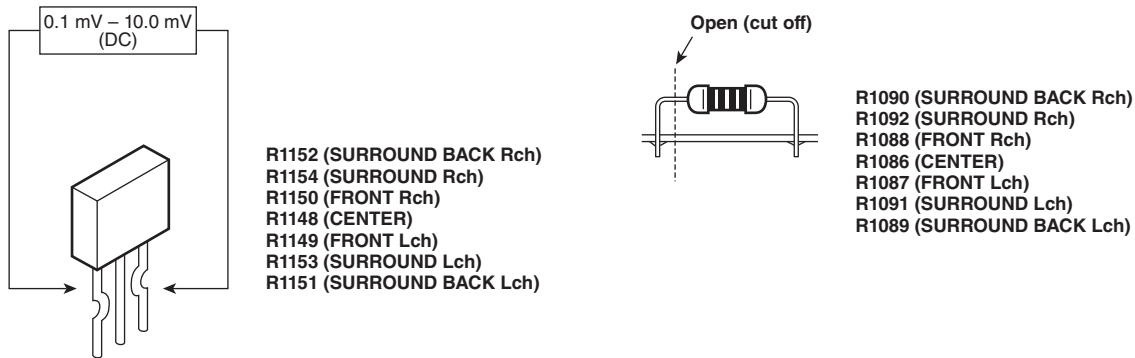
## ■ CONFIRMATION OF IDLING CURRENT OF AMP UNIT

- Right after power is turned on, confirm that the voltage across the terminals of R1152 (SURROUND BACK Rch), R1154 (SURROUND Rch), R1150 (FRONT Rch), R1148 (CENTER), R1149 (FRONT Lch), R1153 (SURROUND Lch), R1151 (SURROUND BACK Lch) are between 0.1 mV and 10.0 mV.
- If it exceeds 10.0 mV, open (cut off) R1090 (SURROUND BACK Rch), R1092 (SURROUND Rch), R1088 (FRONT Rch), R1086 (CENTER), R1087 (FRONT Lch), R1091 (SURROUND Lch), R1089 (SURROUND BACK Lch) and reconfirm the voltage.

### Attention

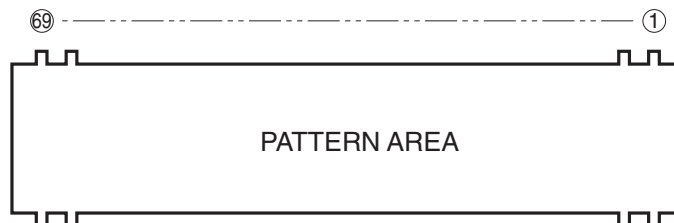
If the measured voltage exceeds 10.0 mV after an amplifier repair, first check for a defective component before cutting the bias resistor.

- Confirm that the voltage is 0.2 mV to 15.0 mV after 60 minutes.



## ■ DISPLAY DATA

### ● V4001 : HNA-18MM03T (OPERATION P.C.B.)



### ● PIN CONNECTION

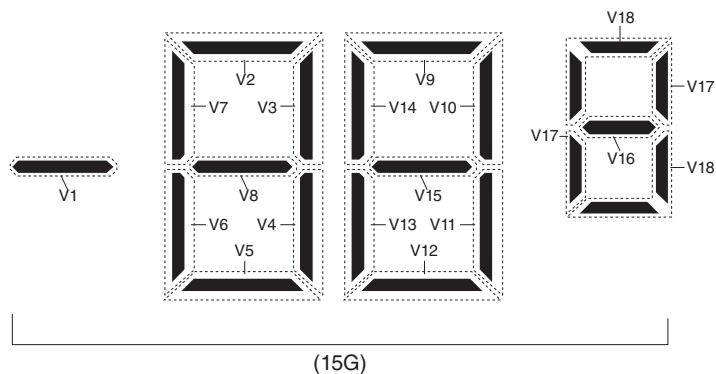
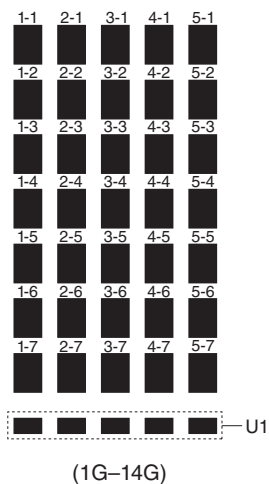
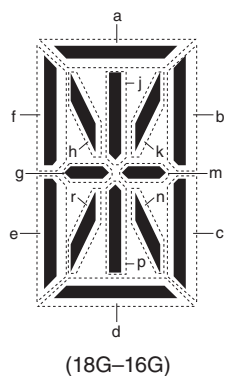
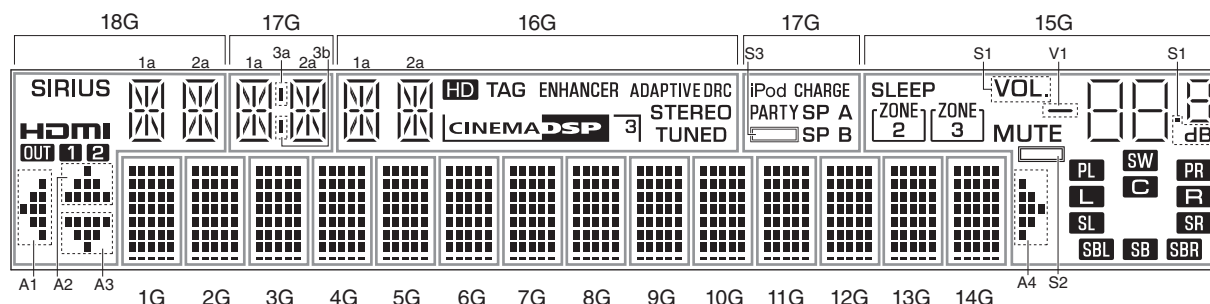
Pin No.	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35
Connection	F2	F2	NP	NP	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22	P23	P24	P25	P26	P27	P28	P29	P30	P31

Pin No.	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Connection	P32	P33	P34	P35	P36	NX	NX	NX	NX	NX	NX	NX	18G	17G	16G	15G	14G	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NP	NP	F1	F1

Note : 1) F1, F2 ..... Filament pin    2) 1G–18G ..... Grid pin    3) P1–P36 ..... Anode pin    4) NP ..... No pin    5) NX ..... No extended pin

### ● GRID ASSIGNMENT



## ● ANODE CONNECTION

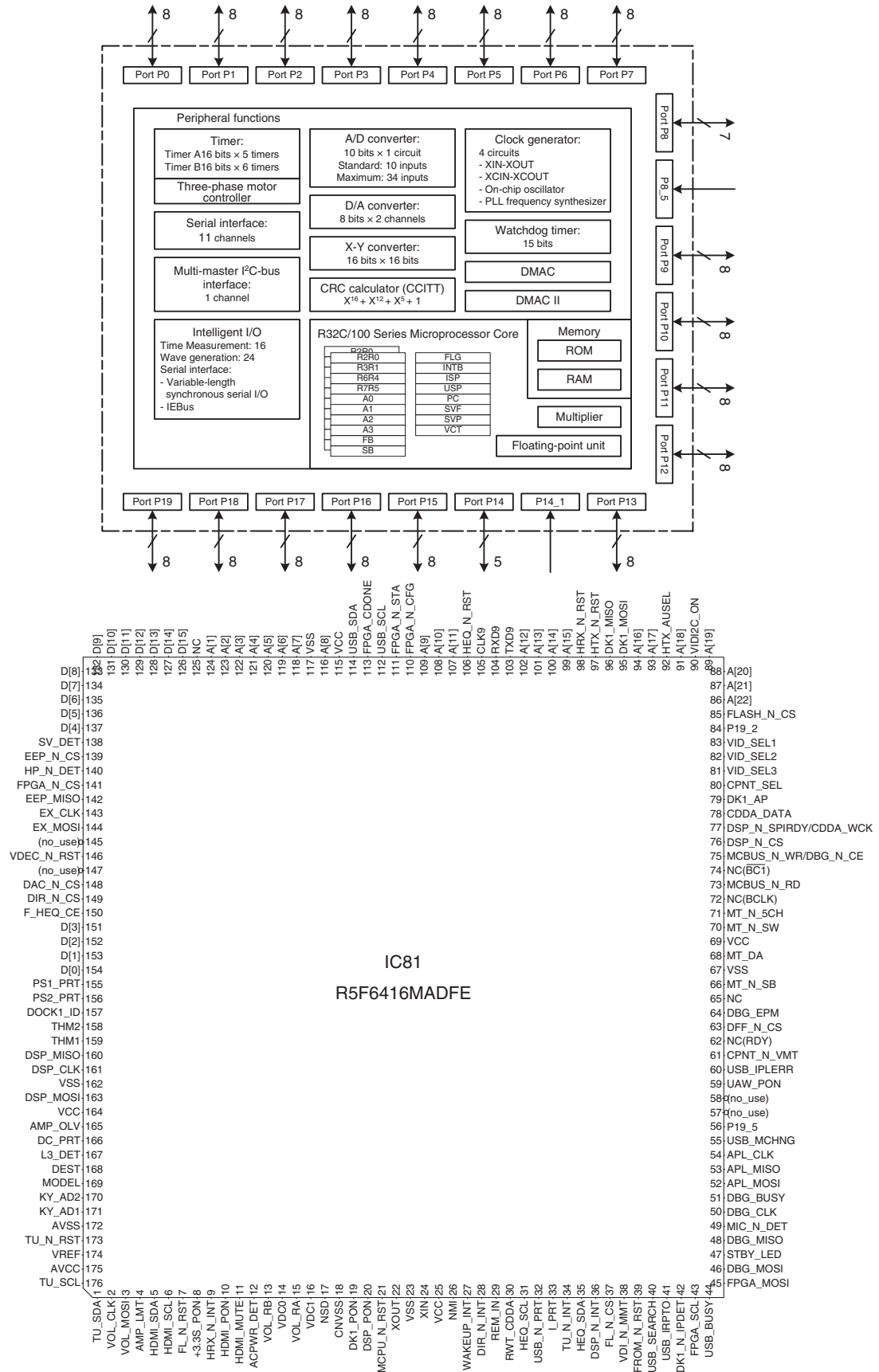
	18G	17G	16G	15G	1G-14G
P1	1a	1a	1a	S1	1-1
P2	1h	1h	1h	V1	2-1
P3	1j	1j	1j	V5	3-1
P4	1k	1k	1k	V12	4-1
P5	1b	1b	1b	V18	5-1
P6	1f	1f	1f	V6	1-2
P7	1m	1m	1m	V13	2-2
P8	1g	1g	1g	V17	3-2
P9	1c	1c	1c	V4	4-2
P10	1e	1e	1e	V11	5-2
P11	1r	1r	1r	V16	1-3
P12	1p	1p	1p	V8	2-3
P13	1n	1n	1n	V15	3-3
P14	1d	1d	1d	V7	4-3
P15	2a	2a	2a	V14	5-3
P16	2h	2h	2h	V3	1-4
P17	2j	2j	2j	V10	2-4
P18	2k	2k	2k	V2	3-4
P19	2b	2b	2b	V9	4-4
P20	2f	2f	2f	<b>PL</b>	5-4
P21	2m	2m	2m	<b>SW</b>	1-5
P22	2g	2g	2g	<b>PR</b>	2-5
P23	2c	2c	2c	<b>L</b>	3-5
P24	2e	2e	2e	<b>C</b>	4-5
P25	2r	2r	2r	<b>R</b>	5-5
P26	2p	2p	2p	<b>SL</b>	1-6
P27	2n	2n	2n	<b>SR</b>	2-6
P28	2d	2d	2d	<b>SBL</b>	3-6
P29	<b>SIRIUS</b>	3a	<b>HD</b>	<b>SB</b>	4-6
P30	<b>OUT</b>	3b	<b>TAG</b>	<b>SBR</b>	5-6
P31	<b>HDMI</b>	iPod CHARGE	<b>CINEMA DSP</b>	A4	1-7
P32	<b>1</b>	SP B	<b>3</b>	S2	2-7
P33	<b>2</b>	S3	<b>STEREO</b>	<b>MUTE</b>	3-7
P34	A1	SP A	<b>TUNED</b>	<b>ZONE 2</b>	4-7
P35	A2	PARTY	<b>ENHANCER</b>	<b>ZONE 3</b>	5-7
P36	A3	—	<b>ADAPTIVE DRC</b>	<b>SLEEP</b>	U1

## IC DATA

**IC81:** R5F6416MADFE (DIGITAL P.C.B.)

Microprocessor

\* No replacement part available.



Pin No.	Port Name	Function Name	Related Power Supply				Detail of Function
			ON		OFF		
			I/O	Logic	I/O	Logic	
1	SRXD4/SDA4/TXD4/ANEX1/P9_6	TUN_SDA	I/O	Data	O	Low	Tuner I2C data
2	CLK4/ANEX0/P9_5	HDR_MOSI	O	Data	O	Low	HD Radio transmission data (U model)
		VOL1_SCK	O	Clock	O	Low	VOL1 (R2A15220FP #1) communication clock
3	N_CTS4/N_N_RTS4/N_SS4/TB4IN/DA1/P9_4	VOL_MOSI	O	Data	O	Low	VOL1/VOL2/VOL3 communication data
4	N_CTS3/N_N_RTS3/N_SS3/TB3IN/DA0/P9_3	AMP_LMT	O	D/A	I	---	Limiter control
5	IEOUT/ISTXD2/OUTC2_0/SRXD3/SDA3/TXD3/TB2IN/P9_2	HDMI_SDA	I/O	Data	O	Low	HDMI and DVIDEO(AVIDEO:Vx071) 400k I2C data
6	IEIN/ISRXD2/STXD3/SCL3/RXD3/TB1IN/P9_1	HDMI_SCL	O	Clock	O	Low	HDMI and DVIDEO (AVIDEO:Vx071) 400k I2C clock
7	CLK3/TB0IN/P9_0	SPRY_5CH	O	H act	O	Low	SP relay 5CH (L, C, R, SRL, SRR)
8	P19_7	PA_B_RY	O	H : B = Low	O	Low	Power amplifier B power supply control
9	N_INT8/P14_6	HRX_N_INT	I	L act	O	Low	Interrupt from HDMI RX
10	P19_6	FLD_N_RST	O	L act	O	Low	FLD reset
11	N_INT7/P14_5	HDMI_MUTE	I	H act	O	Low	Mute from HDMI RX
12	N_INT6/P14_4	PWR_DET	I	L act	I	---	AC power detect
13	P14_3	FLD_N_CS	O	L act	O	Low	FLD chip select
14	VDC0	VDC0					---
15	P14_1 (for exclusive use of the input)	I_PRT	I	H act	I	---	Current protection
16	VDC1	VDC1					---
17	NSD	NSD					Debugger
18	CNVSS	DBG_CNVSS					---
19	XCIN/P8_7	MIC_N_DET	I	L act	O	Low	Microphone detection
20	XCOU/P8_6	PD_LED	O	H act	O	Low	PURE DIRECT LED
21	RESET	MCPU_N_RST					---
22	XOUT	XOUT					---
23	VSS	VSS					---
24	XIN	XIN					---
25	VCC	VCC					---
26	NMI/P8_5	NMI					---
27	N_INT2/P8_4	WAKEUP_INT	I	Both edges	O	Low	Power switch, MISO interrupt of RS-232C and Dock (Sleep return)
28	N_INT1/P8_3	REM_IN2	I	L act	O	Low	Remote control pulse input 2
29	N_INT0/P8_2	REM_IN1	I	L act	O	Low	Remote control pulse input 1
30	UD0B/UD1B/IIO1_5/N_RTS5/N_CTS5/N_SS5/U/TA4IN/P8_1	TUN_N_INT	I	L act	O	Low	Interrupt from TUNER
		---	O	Low	O	Low	No used
31	UD0A/UD1A/RXD5/SCL5/STXD5/U/TA4OUT/P8_0	HEQ_SCL	O	Clock	O	Low	HDMI switcher 100k I2C clock
32	P18_1	FLD_PON	O	H act	O	Low	FL driver +3.3V power supply control
33	P18_0	STBY_LED	O	H act	O	Low	Standby LED control
34	UD0B/UD1B/IIO1_4/CLK5/TA3IN/P7_7	DSP1_N_INT	I	L act	O	Low	Interrupt from DSP1
35	UD0A/UD1A/IIO1_3/N_RTS8/N_CTS8/TXD5/SDA5/SRXD5/TA3OUT/P7_6	HEQ_SDA	I/O	Data	O	Low	HDMI switcher 100k I2C data
36	IIO1_2/RXD8/W/TA2IN/P7_5	DIR_N_INT	I	L act	O	Low	Interrupt from DIR
37	IIO1_1/CLK8/W/TA2OUT/P7_4	IR_CAR	O	Data	O	Low	Carrier output for SCENE IR (spare)
38	P17_7	ISEL_RA	I		I	---	Input selector A
39	P17_6	ISEL_RB	I		I	---	Input selector B
40	P17_5	VOL_RA	I		I	---	Volume A
41	P17_4	VOL_RB	I		I	---	Volume B

Pin No.	Port Name	Function Name	Related Power Supply				Detail of Function
			ON		OFF		
			I/O	Logic	I/O	Logic	
42	IIO1_0/TXD8/N_SS2/ N_RTS2/N_CTS2/V/ TA1IN/P7_3	DK1_N_IPDET	I	L act	O	Low	Dock iPod detect
43	CLK2/V/TA1OUT/ P7_2	SR_PON	O	H act	O	Low	SIRIUS power supply control
44	MSCL/IEIN/ISRXD2/ OUTC2_2/IIO1_7/ STXD2/SCL2/RXD2/ TA0IN/TB5IN/P7_1	SR_MISO	I	Data	O	Low	SIRIUS reception data
45	TA0OUT/TXD2/ SDA2/SRXD2/ IIO1_6/OUTC2_0/ ISTXD2/IEOUT/ MSDA/P7_0	SR_MOSI	O	Data	O	Low	SIRIUS transmission data
46	TXD1/SDA1/SRXD1/ P6_7	232C_DBG_MOSI	O	Data	O	Low	RS-232C transmission data / Debug / E8a
47	P14_7	DSP_PON	O	H act	O	Low	DSP power supply
48	RXD1/SCL1/STXD1/ P6_6	232C_DBG_MISO	I	Data	O	Low	RS-232C reception data / Debug / E8a
49	P11_7	DAC_N_CS	O	L act	O	Low	DAC chip select (SW of V3071, FP DAC is D-FF)
50	CLK1/P6_5	DBG_SCK	I	Clock	O	Low	E8a
51	N_CTS1/N_RTS1/ N_SS1/OUTC2_1/ ISCLK2/P6_4	DBG_BUSY	O		O	Low	E8a
52	TXD0/SDA0/SRXD0/ P6_3	DSP_MOSI	O	Data	O	Low	DSP/DIR/DAC transmission data
53	TB2IN/RXD0/SCL0/ STXD0/P6_2	DSP_MISO	I	Data	I	---	DSP/DIR/DAC reception data
54	TB1IN/CLK0/P6_1	DSP_SCK	O	Clock	O	Low	DSP/DIR/DAC communication clock
55	TB0IN/N_CTS0/N_ RTS0/N_SS0/P6_0	NCPU_N_INT	I	H act	O	Low	Network microprocessor interrupt
56	P19_5	---	I	---	I	---	No used (+3.3DSP is applied, input port setting)
57	D31/OUTC2_7/ P13_7	DSP1_N_RST	O	L act	O	Low	DSP1 reset
58	D30/OUTC2_1/ ISCLK2/P13_6	EX_SCK	O	Clock	O	Low	FL/EEPROM/ expansion IO communication clock
59	D29/OUTC2_2/IS- RXD2/IEIN/P13_5	EEP_MISO	I	Data	O	Low	EEPROM reception data
60	D28/OUTC2_0/ ISTXD2/IEOUT/ P13_4	EX_MOSI	O	Data	O	Low	FL/EEPROM/ expansion IO transmission data
61	P19_4	EEP_N_CS	O	L act	O	Low	EEPROM chip select
62	RDY/CS3/N_CTS7/ N_RTS7/P5_7	FPGA_N_CS	B	Bus	O	Low	External bus FPGA chip select
63	ALE/CS2/RXD7/P5_6	DFF2_N_CS	B	Bus	O	Low	External bus DFF2 chip select
64	HOLD/CLK7/P5_5	DBG_EPM	I		I	---	E8a
65	HLDA/CS1/TXD7/ P5_4	DFF1_N_CS	B	Bus	O	Low	External bus DFF1 chip select
66	D27/OUTC2_3/ P13_3	---	O	Low	O	Low	No used
67	VSS	VSS					---
68	D26/OUTC2_6/ P13_2	DSP1_N_SPIRDY	I	L act	O	Low	DSP1 SPI ready
69	VCC	VCC					---
70	D25/OUTC2_5/ P13_1	DSP2_N_CS	O	L act	O	Low	DSP2 chip select
71	D24/OUTC2_4/ P13_0	DSP1_N_CS	O	L act	O	Low	DSP1 chip select
72	CLKOUT/BCLK/P5_3	NC(BCLK)	B	Bus	O	Low	External bus
73	RD/P5_2	MCBUS_N_RD	B	Bus	O	Low	External bus
74	WR1/BC1/P5_1	NC(BC1)	B	Bus	O	Low	External bus
75	WR0/WR/P5_0	MCBUS_N_WR	B	Bus	I	---	External bus
		DBG_N_CE	I		I	---	E8a
76	D23/P12_7	MT_DA	O	H act	O	Low	Mute Digital Audio
77	D22/P12_6	DIR_N_CS	O	L act	O	Low	DIR chip select
78	D21/P12_5	DIR_N_RST	O	L act	O	Low	DIR reset

Pin No.	Port Name	Function Name	Related Power Supply				Detail of Function
			ON		OFF		
			I/O	Logic	I/O	Logic	
79	P19_3	DK1_AP	I	L act	I	---	iPod accessory power
80	P17_3	DK1_PON	O	H act	O	Low	Dock power supply
81	P17_2	UAW_PON	O	H act	O	Low	UAW power supply control
82	P17_1	NCPU_PON	O	H act	O	Low	NET/USB power supply
83	P17_0	NET_SEL_M	O	H NET	O	Low	Main USB/NET select
84	P19_2	NET_SEL_Z	O	H NET	O	Low	Zone USB/NET select
85	CS0/A23/TXD6/ SDA6/SRXD6/P4_7	FLASH_N_CS	O	L act	O	Low	External bus Flash ROM chip select
86	CS1/A22/RXD6/ SCL6/STXD6/P4_6	A[22]	B	Bus	O	Low	External bus
87	CS2/A21/CLK6/P4_5	A[21]	B	Bus	O	Low	External bus
88	CS3/A20/N_CTS6/N_ RTS6/N_SS6/P4_4	A[20]	B	Bus	O	Low	External bus
89	A19/TXD3/SDA3/ SRXD3/OUTC2_0/ ISTXD2/IEOUT/P4_3	A[19]	B	Bus	O	Low	External bus
90	P11_6	---	O	Low	O	Low	Spare
91	A18/RXD3/SCL3/ STXD3/ISRXD2/IEIN/ P4_2	A[18]	B	Bus	O	Low	External bus
92	P11_5	---	O	Low	O	Low	Spare
93	A17/CLK3/P4_1	A[17]	B	Bus	O	Low	External bus
94	A16/N_CTS3/N_ RTS3/N_SS3/P4_0	A[16]	B	Bus	O	Low	External bus
95	P16_7/TXD10	DK_MOSI	O	Data	O	Low	Dock UART transmission data
96	P16_6/RXD10	DK_MISO	I	Data	I	---	Dock UART reception data (3.3V logic input)
97	P16_5/CLK10	R32C_N_INT	O	L act	O	Low	Interrupt of R32C to Blackfin
98	P16_4/N_CTS10/N_ RTS10	BF_MT	I	H act	O	Low	Mute signal from Blackfin (NCPU_N_INT distinction use)
99	A15/[A15/D15]/TA4IN/ U/P3_7	A[15]	B	Bus	O	Low	External bus
100	A14/[A14/D14]/ TA4OUT/U/P3_6	A[14]	B	Bus	O	Low	External bus
101	A13/[A13/D13]/TA2IN/ W/P3_5	A[13]	B	Bus	O	Low	External bus
102	A12/[A12/D12]/ TA2OUT/W/P3_4	A[12]	B	Bus	O	Low	External bus
103	P16_3/TXD9	NCPU_PIC_MISO	O	Data	O	Low	Network microprocessor SPI transmission data
104	P16_2/RXD9	NCPU_PIC_MOSI	I	Data	O	Low	Network microprocessor SPI reception data
105	P16_1/CLK9	NCPU_PIC_SCK	I	Clock	O	Low	Network microprocessor SPI communication clock
106	P16_0/N_CTS9/N_ RTS9	NCPU_N_RST	O	L act	O	Low	Network microprocessor reset
107	A11/[A11/D11]/TA1IN/ V/P3_3	A[11]	B	Bus	O	Low	External bus
108	A10/[A10/D10]/ TA1OUT/V/P3_2	A[10]	B	Bus	O	Low	External bus
109	A9/[A9/D9]/TA3OUT/ UD0B/UD1B/P3_1	A[9]	B	Bus	O	Low	External bus
110	D20/P12_4	---	O	Low	O	Low	Spare
111	D19/N_CTS6/N_ RTS6/N_SS6/P12_3	---	O	Low	O	Low	Spare
112	D18/RXD6/SCL6/ STXD6/P12_2	---	O	Low	O	Low	Spare (After FPGA Config, I2C is possible)
113	D17/CLK6/P12_1	FPGA_SCK	O	Clock	O	Low	FPGA clock (at Boot)
114	D16/TXD6/SDA6/ SRXD6/P12_0	FPGA_MOSI	O	Data	O	Low	FPGA transmission data (at Boot)
115	VCC	VCC					---
116	A8/[A8/D8]/TA0OUT/ UD0A/UD1A/P3_0	A[8]	B	Bus	O	Low	External bus
117	VSS	VSS					---
118	A7/[A7/D7]/AN2_7/ P2_7/TXD10	A[7]	B	Bus	O	Low	External bus
119	A6/[A6/D6]/AN2_6/ P2_6/RXD10	A[6]	B	Bus	O	Low	External bus
120	A5/[A5/D5]/AN2_5/ P2_5/CLK10	A[5]	B	Bus	O	Low	External bus




Pin No.	Port Name	Function Name	Related Power Supply				Detail of Function
			ON		OFF		
			I/O	Logic	I/O	Logic	
121	A4/[A4/D4]/AN2_4/ P2_4/N_CTS10/N_ RTS10	A[4]	B	Bus	O	Low	External bus
122	A3/[A3/D3]/AN2_3/ P2_3/TXD9	A[3]	B	Bus	O	Low	External bus
123	A2/[A2/D2]/AN2_2/ P2_2/RXD9	A[2]	B	Bus	O	Low	External bus
124	A1/[A1/D1]/BC2/ [BC2/D1]/AN2_1/ P2_1/CLK9	A[1]	B	Bus	O	Low	External bus
125	A0/[A0/D0]/BC0/ [BC0/D0]/AN2_0/ P2_0/N_CTS9/N_ RTS9	A[0]	B	Bus	O	Low	External bus
126	D15/N_INT5/IIO0_7/ IIO1_7/P1_7	D[15]	B	Bus	I	---	External bus
127	D14/N_INT4/IIO0_6/ IIO1_6/P1_6	D[14]	B	Bus	I	---	External bus
128	D13/N_INT3/IIO0_5/ IIO1_5/P1_5	D[13]	B	Bus	I	---	External bus
129	D12/IIO0_4/IIO1_4/ P1_4	D[12]	B	Bus	I	---	External bus
130	D11/IIO0_3/IIO1_3/ P1_3	D[11]	B	Bus	I	---	External bus
131	D10/IIO0_2/IIO1_2/ P1_2	D[10]	B	Bus	I	---	External bus
132	D9/IIO0_1/IIO1_1/ P1_1	D[9]	B	Bus	I	---	External bus
133	IIO0_0/IIO1_0/D8/ P1_0	D[8]	B	Bus	I	---	External bus
134	AN0_7/D7/P0_7	D[7]	B	Bus	I	---	External bus
135	AN0_6/D6/P0_6	D[6]	B	Bus	I	---	External bus
136	AN0_5/D5/P0_5	D[5]	B	Bus	I	---	External bus
137	AN0_4/D4/P0_4	D[4]	B	Bus	I	---	External bus
138	P19_1	FPGA_N_CFG	O	L act	O	Low	FPGA nCONF
139	WR3/BC3/P11_4	FPGA_N_STA	I	L act	I	---	FPGA nSTATUS
140	P19_0	FPGA_CDONE	I	H act	I	---	FPGA CONF DONE
141	IIO1_3/N_RTS8/N_ CTS8/WR2/CS3/ P11_3	---	O	Low	O	Low	No used
142	IIO1_2/RXD8/CS2/ P11_2	NCPU_MISO	I	Data	O	Low	Network microprocessor UART reception data
143	IIO1_1/CLK8/CS1/ P11_1	SPRY_Z2&FP	O	H act	O	Low	SP relay Zone2 and Front Presence
144	IIO1_0/TXD8/CS0/ P11_0	NCPU_MOSI	O	Data	O	Low	Network microprocessor UART transmission data
145	P18_7	HPRY	O	H act	O	Low	HP relay
146	P18_6	MT_N_Z2	O	L act	O	Low	Mute Zone2 (Line out)
147	P18_5	---	O	H act	O	Low	No used
148	P18_4	MT_N_5CH	O	L act	O	Low	Mute 5ch (L, C, R, SRL, SRR Preout/Main amplifier input)
149	P18_3	MT_N_SW	O	L act	O	Low	Mute Subwoofer (Preout)
150	P18_2	MT_N_SB	O	L act	O	Low	Mute SB/BA/Z2/FP (Preout/Main amplifier input)
151	AN0_3/D3/P0_3	D[3]	B	Bus	I	---	External bus
152	AN0_2/D2/P0_2	D[2]	B	Bus	I	---	External bus
153	AN0_1/D1/P0_1	D[1]	B	Bus	I	---	External bus
154	AN0_0/D0/P0_0	D[0]	B	Bus	I	---	External bus
155	IIO0_7/N_RTS6/ N_CTS6/N_SS6/ AN15_7/P15_7	SVID_DET	I	H act	I	---	S-video detect
156	IIO0_6/CLK6/ AN15_6/P15_6	HP_N_DET	I	L act	O	Low	Headphone detection
157	IIO0_5/RXD6/SCL6/ STXD6/AN15_5/ P15_5	EX1_N_CS	O	L act	O	Low	Expansion IO 1 chip select

Pin No.	Port Name	Function Name	Related Power Supply				Detail of Function
			ON		OFF		
			I/O	Logic	I/O	Logic	
158	IIO0_4/TXD6/SDA6/ SRXD6/AN15_4/ P15_4	EX1_N_RST	O	L act	O	Low	Expansion IO 1 reset
159	IIO0_3/N_RTS7/N_ CTS7/AN15_3/P15_3	AD_SEL_A	O		O	Low	AD select A
160	IIO0_2/RXD7/ AN15_2/P15_2	AD_SEL_B	O		O	Low	AD select B
161	IIO0_1/CLK7/ AN15_1/P15_1	IR_OUT	O	Data	O	Low	Remote control cord output
162	VSS	VSS					---
163	IIO0_0/TXD7/ AN15_0/P15_0	AD_SEL_C	O		O	Low	AD select C
164	VCC	VCC					---
165	KI3/AN_7/P10_7	+3.3S_PON	O	H act	O	Low	+3.3S power supply
166	KI2/AN_6/P10_6	---	I	A/D	O	Low	No used
167	KI1/AN_5/P10_5	AD1_COM	I	A/D	O	Low	AD selector 1 COM input
168	KI0/AN_4/P10_4	DEST	I	A/D	O	Low	Destination distinction
169	AN_3/P10_3	MODEL	I	A/D	O	Low	Model distinction
170	AN_2/P10_2	KY_AD2	I	A/D	O	Low	Key 2
171	AN_1/P10_1	KY_AD1	I	A/D	O	Low	Key 1
172	AVSS	AVSS					---
173	AN_0/P10_0	TUN_N_RST	O	L act	O	Low	Tuner reset
		HDR_N_RST	O	L act	O	Low	HD Radio reset (U model)
174	VREF	VREF					---
175	AVCC	AVCC					---
176	STXD4/SCL4/RXD4/ ADTRG/P9_7	TUN_SCL	O	Data	O	Low	Tuner I2C clock
		HDR_MISO	I	Data	O	Low	HD Radio reception data (U model)

## Key detection for A/D port

Key input (A/D) pull-up resistance 10 k-ohms

Ohm	0	+ 1.0 k	+ 1.0 k	+ 1.5 k	+ 1.5 k	+ 2.2 k	22.0 k	33.0 k
V	0 – 0.15	0.15 – 0.42	0.43 – 0.70	0.71 – 0.97	0.98 – 1.24	1.25 – 1.53	2.23 – 2.62	2.63 – 3.04
A/D conversion value (3.3 V=255)	0 – 11	12 – 32	33 – 54	55 – 75	76 – 96	97 – 119	182 – 197	198 – 209
KEY1 (171 pin)	RADIO (SCENE4)	CD (SCENE3)	TV (SCENE2)	BD/DVD (SCENE1)	ZONE2 CONTROL	ZONE2 ON/OFF	MAIN ZONE  (power)	TONE CONTROL

Ohm	0	+ 1.0 k	+ 1.0 k	+ 1.5 k	+ 1.8 k	+ 2.2 k	+ 3.3 k	+ 4.7 k	+ 6.8 k	+ 10.0 k
V	0 – 0.15	0.16 – 0.42	0.43 – 0.70	0.71 – 0.99	1.00 – 1.27	1.28 – 1.56	1.57 – 1.86	1.87 – 2.14	2.15 – 2.39	2.40 – 2.65
A/D conversion value (3.3 V=255)	0 – 11	12 – 32	33 – 54	55 – 77	78 – 99	100 – 121	122 – 144	145 – 166	167 – 186	187 – 205
KEY2 (170 pin)	PURE DIRECT	TUNING >>	TUNING <<	AM	FM	PRESET >	PRESET <	MEMORY	INFO	STRAIGHT

## Destination detection for AD port

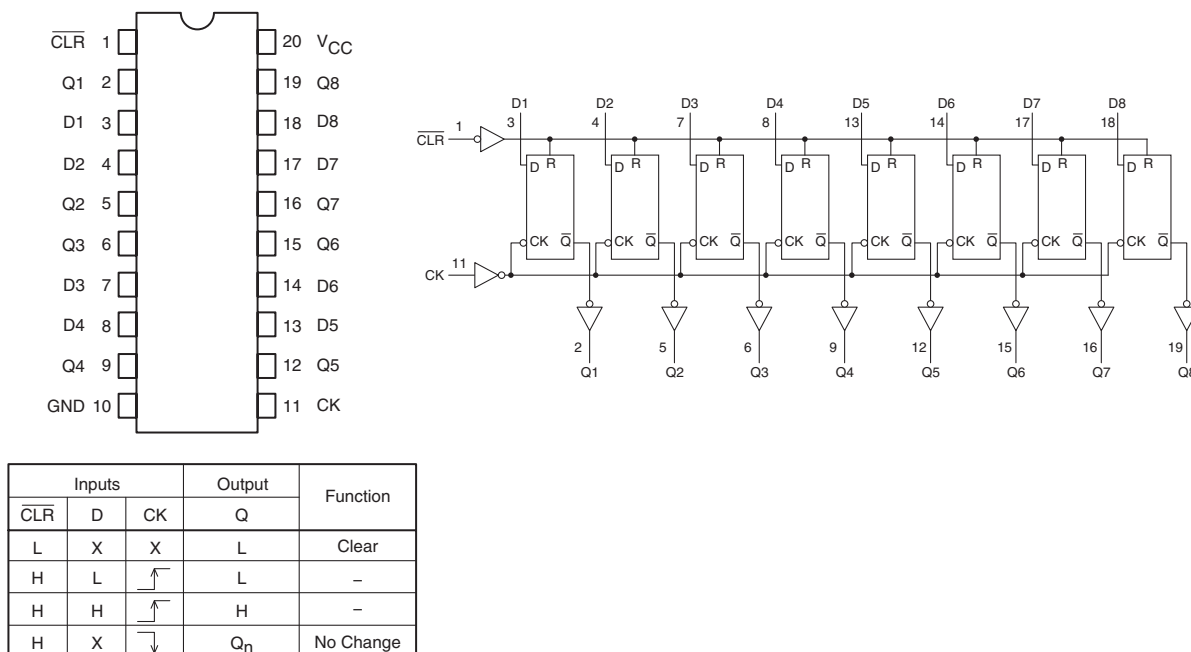
Pull-up resistance 10 k-ohms

R3809 (VIDEO P.C.B.)	0	1.2 k	2.7 k	4.7 k	6.8 k	10.0 k	15.0 k	47.0 k	100.0 k
V	0 – 0.16	0.17 – 0.51	0.52 – 0.87	0.88 – 1.92	1.93 – 1.49	1.50 – 1.81	1.82 – 2.35	2.36 – 2.86	2.87 – 3.15
A/D conversion value (3.3 V=255)	0 – 12	13 – 39	40 – 67	68 – 92	93 – 115	116 – 140	141 – 169	199 – 221	222 – 244
Destination (168 pin)	J	U	C	R, S	T	K	A	B, G, F	L

- **Microprocessor extended port**

**IC84, 85:** TC74VHC273FT (DIGITAL P.C.B.)

Octal D-type flip-flop with clear



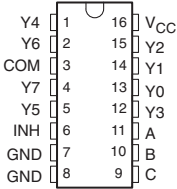
**IC84 (D-FF12)**

Pin No.	R32C external bus data	Function Name	Related Power Supply				Detail of Function
			ON		OFF		
			I/O	Logic	I/O	Logic	
2	D[8]	HDMI_PON	O	H act	O	Low	HDMI power supply (Necessary for DSP, AVIDEO drive)
5	D[9]	HRX_N_RST	O	L act	O	Low	HDMI RX reset
6	D[10]	HTX1_N_RST	O	L act	O	Low	HDMI TX reset
9	D[11]	HTX2_N_RST	O	L act	O	Low	HDMI TX2 reset
12	D[12]	FROM_N_RST	O	L act	O	Low	FLASH reset
15	D[13]	HTX_AUSEL	O	H HRX	O	Low	HDMI TX sound select
16	D[14]	HAU_N_OE	O	L act	O	Low	HDMI to DIR sound output enable
19	D[15]	VIDI2C_ON	O	H act	O	Low	I2C line switch to video device

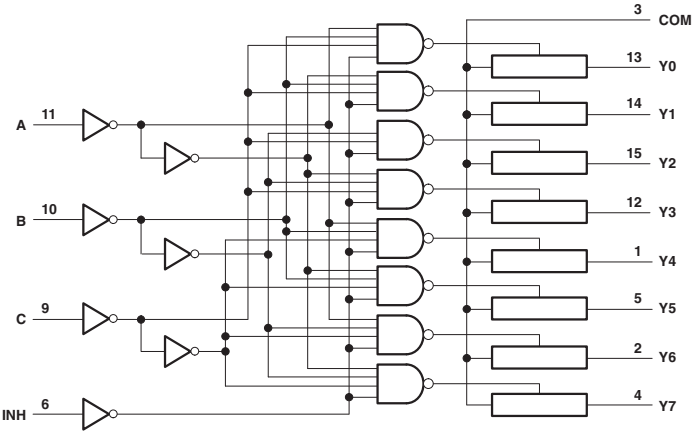
**IC85 (D-FF11)**

Pin No.	R32C external bus data	Function Name	Related Power Supply				Detail of Function
			ON		OFF		
			I/O	Logic	I/O	Logic	
2	D[0]	HEQ_N_RST	O	L act	O	Low	HDMI switcher reset
5	D[1]	VDEC_N_RST	O	L act	O	Low	Video decoder reset
6	D[2]	USB_OC_FLG	O	H act	O	Low	USB overcurrent detection flag R32C to BF
9	D[3]	HRX_VSEL	O	L DEC	O	Low	Video decoder to scaler line enable
12	D[4]	F_HEQ_CE	O	H act	O	Low	Front HDMI EQ chip enable
15	D[5]	VID_PON	O	H act	O	Low	Video power supply
16	D[6]	+3.3D_PON	O	H act	O	Low	OR of HDMI_PON, DSP_PON, NET_USB_PON
19	D[7]	PRY	O	H act	O	Low	Power relay

IC89: SN74LV4051APWR (DIGITAL P.C.B.)  
8-channel analog multiplexers/demultiplexers



INPUTS				ON CHANNEL
INH	C	B	A	
L	L	L	L	Y0
L	L	L	H	Y1
L	L	H	L	Y2
L	L	H	H	Y3
L	H	L	L	Y4
L	H	L	H	Y5
L	H	H	L	Y6
L	H	H	H	Y7
H	X	X	X	None



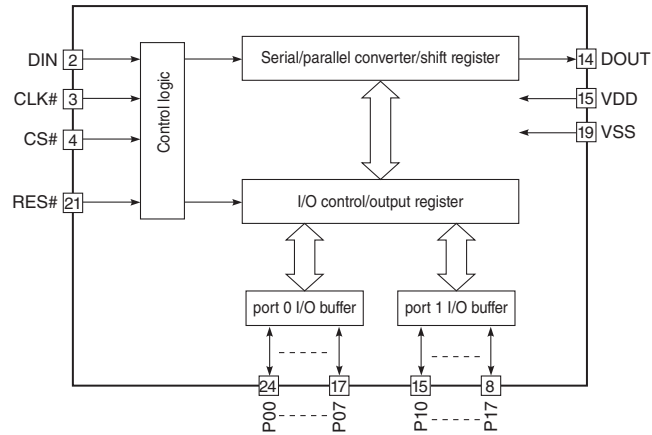
Pin No.	Port Name	Function Name	Related Power Supply				Detail of Function
			ON		OFF		
			I/O	Logic	I/O	Logic	
AD selector 1 (AD1_COM signal is input into AN_5 of R32C)							
1	Y4	PS2_PRT	I	A/D	I	---	Power supply protection 2
2	Y6	PS1_PRT	I	A/D	I	---	Power supply protection 1
4	Y7	AMP_OLV	I	A/D	I	---	Amplifier output level detection
5	Y5	DC_PRT	I	A/D	I	---	DC protection
12	Y3	THM1	I	A/D	I	---	Temperature detection 1
13	Y0	DK1_ID	I	A/D	I	---	Dock ID detection
14	Y1	L3_DET	I	A/D	I	---	D terminal L3 detection
15	Y2	MODE	I	A/D	I	---	Special mode distinction

DOCK detection for AD port  
Pull-up resistance 10 k-ohms

DOCK type (DKID 13 pin)	Bluetooth (YBA-10)	Wireless iPod (YID-W10)	iPod		No connected
			(YDS-10/11/12(B*))	(YDS-12(A*))	
A/D value (3.3 V=255)	5 – 25	85 – 100	120 – 140	150 – 170	255

\* Mode switch setting of the YDS-12

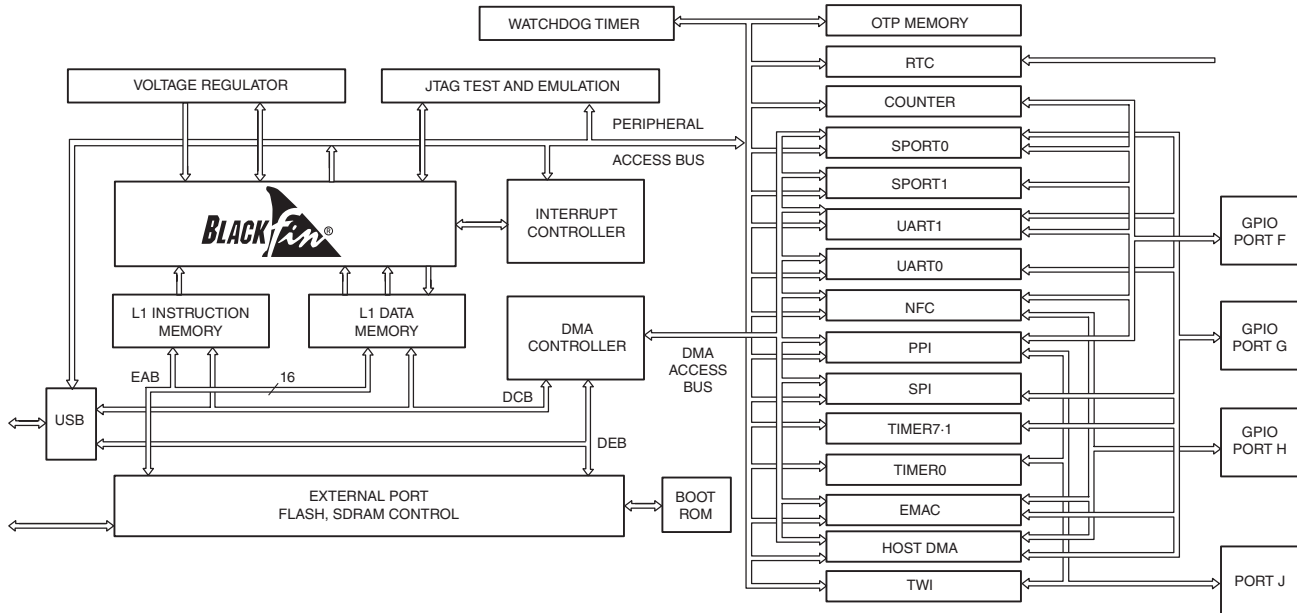
**IC308:** LC709004A-TLM-E (VIDEO P.C.B.)  
I/O-expander for microcontroller



Pin No.	Port Name	Function Name	Related Power Supply				Detail of Function
			ON		OFF		
			I/O	Logic	I/O	Logic	
8	P17	VID_N_MMT	O	L act	O	Low	Monitor output mute
9	P16	VID_BYPS	O	H act	O	Low	Composite bypass line select
10	P15	–	O	Low	O	Low	No used
11	P14	–	O	Low	O	Low	No used
12	P13	CPNT_N_VMT	O	L act	O	Low	Component output mute
13	P12	DC_TRG1	O	H act	O	Low	Control out 1
14	P11	–	O	Low	O	Low	No used
15	P10	–	O	Low	O	Low	No used
17	P07	VID_N_RMT	O	L act	O	Low	AVOUT mute
18	P06	VID_SEL1	O		O	Low	Input select of Y/C
19	P05	VID_SEL2	O		O	Low	Input select of Y/C
20	P04	VID_SEL3	O		O	Low	Input select of Y/C
21	P03	CPNT_BYPS	O	H act	O	Low	Component bypass line select
22	P02	CPNT_SEL	O	L act	O	Low	Component input select
23	P01	–	O	Low	O	Low	No used
24	P00	–	O	Low	O	Low	No used

**IC901:** ADSST-DR-11Z (DIGITAL P.C.B.)

Network microprocessor

\* **No replacement part available.**

Pin No.		Port Name	Function Name	ON		Detail of Function
				I/O	Logic	
1	A1	GND	GND			
2	A2	PF9/PPI_D9/ RSCLK1/%SPISEL6%	DBG_LED1	B	Data	Debug input/output port1 (DIP_SW1 input/LED1 output)
3	A3	PF11/PPI_D11/TFS1/CZM	BF_WCK1	I	Clock	I2S word clock input
4	A4	SCL	BF_I2C_SCL	O	Clock	EEPROM / VideoENC / Apple_Coprocessor / Clock I2C data
5	A5	PF13/PPI_D13/ TSCLK1/%SPISEL3%/CUD	BF_BCK1	I	Clock	I2S Bit clock input
6	A6	PF15/PPI_D15/DR1SEC/UAR- T1RX/TACI3	---			
7	A7	PH0/ND_D0/MIICRS/RMIICRSDV/ HOST_D0	RMII_CRSDV	I	Data	PHY: RMII carrier sence/DataValid
8	A8	PH2/ND_D2/MDIO/HOST_D2	PHY_MDIO	B	Data	PHY: Management channel clock
9	A9	PH4/ND_D4/MIITXCLK/RMII_REF- CLK/HOST_D4	RMII_REFCLK	I	Clock	PHY: RMII reference clock (50MHz)
10	A10	XTAL				23.04MHz crystal
11	A11	CLKIN				23.04MHz crystal
12	A12	PH8/%SPISEL4%/ERXD1/HOST_ D8/TACKL2	RMII_RXD1	I	Data	PHY: RMII RXD1
13	A13	PH10/%ND_CE%/ERXD2/HOST_ D10	PHY_N_FDX	I	Data	PHY: PHY_NWAYEN
14	A14	RTXI		I	Clock	
15	A15	RTXO		O	Clock	
16	A16	VDDRTC				
17	A17	GND				
18	A18	USB_XO		O	Clock	
19	A19	USB_XI		I	Clock	24MHzUSB clock input
20	A20	GND				
21	B1	PF7/PPI_D7/DR0SEC/ND_D7A/ TACI1	USB_FSSEL	O	Data	I2S (USB) FS select
22	B2	PF8/PPI_D8/DR1PRI	DBG_LED0	B	Data	Debug input/output port0 (DIP_SW0 input/LED0 output)
23	B3	PF10/PPI_D10/RFS1/%SPISEL7%	PLD_N_RST	O	L act	PLD reset
24	B4	SDA	BF_I2C_SDA	B	Data	I2C data (EEPROM / Apple_Coprocessor / Clock)
25	B5	PF12/PPI_D12/ DT1PRI/%SPISEL2%/CDG	BF_SDO1	O	Data	I2S1 data output
26	B6	PF14/PPI_D14/DT1SEC/UART1TX	APPLE_N_RST	O	L act	Apple certification chip reset (L: reset)
27	B7	PH1/ND_D1/ERXER/HOST_D1	RMII_RXER	I	Data	PHY: RMII receive error
28	B8	PH3/ND_D3/ETXEN/HOST_D3	RMII_TXEN	O	Clock	PHY: RMII TX enable

Pin No.		Port Name	Function Name	ON		Detail of Function
				I/O	Logic	
29	B9	PH5/ND_D5/ETXD0/HOST_D5	RMII_TXD0	O	Data	PHY: RMII TXD0
30	B10	PH6/ND_D6/ERXD0/HOST_D6	RMII_RXD0	I	Data	PHY: RMII RXD0
31	B11	PH7/ND_D7/ETXD1/HOST_D7	RMII_TXD1	O	Data	PHY: RMII TXD1
32	B12	PH9/%SPISEL5%/ETXD2/HOST_D9/TACLK3	SPI_N_ON	O	Data	R32C to/from Blackfin SPI_I/F switch control (L: active, H: off)
33	B13	PH11/%ND_WE%/ETXD3/HOST_D11	PHY_N_100M	O	Data	PHY_SPEED
34	B14	PH12/%ND_RE%/ERXD3/HOST_D12	PHY_N_RST	O	H act	PHY Rset (L: reset)
35	B15	PH13/%ND_BUSY%/ERXCLK/HOST_D13	USB_PWR	O	H act	USB vbus power Control (H: power on)
36	B16	PH14/ND_CLE/ERXDV/HOST_D14	BF_MT	O	H act	Mute output to R32C
37	B17	PH15/ND_ALE/COL/HOST_D15	USB_OC_FLG	I	H act	USB vbus over current flag (R32C to BF)
38	B18	/RESET	BF_N_RST	I	Lact	CPU reset
39	B19	/NMI				
40	B20	GND				
41	C1	PF5/PPI_D5/TSCCLK0/ND_D5A/TACLK1	BF_BCK0	I	Clock	I2S0 BCK input
42	C2	PF6/PPI_D6/DT0SEC/ND_D6A/TACIO	USB_MSEL	O	Data	I2S (USB) master clock select
43	C19	CLKBUF	(USB_REFCLK)			CPU clock buffered output
44	C20	USB_ID	USB_ID	I	Data	USB ID
45	D1	PF3/PPI_D3/DT0PRI/ND_D3A	BF_SDO0	O	Data	I2S0 data output
46	D2	PF4/PPI_D4/TFS0/ND_D4A/TA-CLK0	BF_WCK0	I	Clock	I2S0 WCK input
47	D19	VDDUSB				
48	D20	USB_RSET	---			
49	E1	PF1/PPI_D1/RFS0/ND_D1A	NET_FSSEL	O	Data	I2S (NET) FS select
50	E2	PF2/PPI_D2/RSCLK0/ND_D2A	R32C_N_INT	I	L act	Interrupt input from R32C
51	E19	USB_VBUS	USB_VBUS	I	-	USB_VBUS
52	E20	USB_DP	USB_DP	B	Data	USB Data D+
53	F1	PF0/PPI_D0/DR0PRI/ND_D0A	NET_MSEL	O	Data	I2S (NET) master clock select
54	F2	PPI_FS1/TMR0	---			
55	F19	VRSEL/VDDEXT				
56	F20	USB_DM	USB_DM	B	Data	USB data D-
57	G1	PG15/TFS0A/MII PHYINT/RMII MDINT/HOST_CE	RMII_MDINT			RMII management
58	G2	PPI_CLK/TMRCLK				
59	G7	VDDEXT				
60	G8	VDDEXT				
61	G9	VDDEXT				
62	G10	VDDEXT				
63	G11	VDDEXT				
64	G12	VDDINT				
65	G13	VDDINT				
66	G14	VDDINT				
67	G19	SS//PG				
68	G20	VDDUSB				
69	H1	PG13/DMAR0/UART1RXA/HOST_ADDR/TACI2	NCPU_MOSI	I	Data	UART input R32C to Blackfin
70	H2	PG14/TSCCLK0A1/MDC/%HOST_RD%	PHY_MDC			PHY MDC
71	H7	VDDEXT				
72	H8	VDDEXT				
73	H9	GND				
74	H10	GND				
75	H11	GND				
76	H12	GND				
77	H13	GND				
78	H14	VDDINT				
79	H19	USB_VREF		O	-	
80	H20	VR0UT/EXT_WAKE1	VR0UT	O	PWM	
81	J1	PG11/TMR7/%HOST_WR%	NCPU_N_INT	O	L act	Interrupt to BF to R32C
82	J2	PG12/DMAR1/UART1TXA/HOST_ACK	NCPU_MISO	O	Data	UART output Blackfin to R32C
83	J7	VDDEXT				
84	J8	VDDEXT				
85	J9	GND				

Pin No.		Port Name	Function Name	ON		Detail of Function
				I/O	Logic	
86	J10	GND				
87	J11	GND				
88	J12	GND				
89	J13	GND				
90	J14	VDDINT				
91	J19	/AMS0	---			
92	J20	EXT_WAKE0		O	Data	Wake up indication 0
93	K1	PG9/TMR5/RSCLK0A/TACI5	NCPU_PIC_MISO	O	L act	Buffer overflow flag of FPGA
94	K2	PG10/TMR6/TSCLK0A/TACI6	MT_DAC_Z	O	H act	ZONE DAC mute
95	K7	VDDEXT				
96	K8	VDDEXT				
97	K9	GND				
98	K10	GND				
99	K11	GND				
100	K12	GND				
101	K13	GND				
102	K14	VDDINT				
103	K19	/AMS1	---			
104	K20	CLKOUT	BF_CLK	O	Clock	SDRAM clock
105	L1	PG7/TMR3/DR0PRIA/UART0TX	DBG_MOSI	O	Data	UART Tx for Debug
106	L2	PG8/TMR4/RFS0A/UART0RX/TACI4	DBG_MISO	I	Data	UART Rx for Debug
107	L7	VDDEXT				
108	L8	VDDMEM				
109	L9	GND				
110	L10	GND				
111	L11	GND				
112	L12	GND				
113	L13	GND				
114	L14	VDDINT				
115	L19	VPPOTP				
116	L20	/AMS3	---			
117	M1	PG5/TMR1/PPI_FS2	---	O	L act	
118	M2	PG6/DT0PRIA/TMR2/PPI_FS3	APPLE_I2C_ON	O	H act	APPLE I2C line switch control (H: connect, L: disconnect)
119	M7	VDDMEM				
120	M8	VDDMEM				
121	M9	GND				
122	M10	GND				
123	M11	GND				
124	M12	GND				
125	M13	GND				
126	M14	VDDINT				
127	M19	/AMS2	---			
128	M20	/ARE	BF_N_ARE	O	L act	EBIU read enable
129	N1	PG3/MISO/DR0SECA	BF_SPI_MISO	I	Data	
130	N2	PG4/MOSI/DT0SECA	BF_SPI_MOSI	O	Data	
131	N7	VDDMEM				
132	N8	VDDMEM				
133	N9	GND				
134	N10	GND				
135	N11	GND				
136	N12	GND				
137	N13	GND				
138	N14	VDDINT				
139	N19	/AWE	BF_N_WR	O	L act	EBIU write enable
140	N20	/AOE	---	O	L act	
141	P1	PG1/SPISS/SPISEL1	SFLASH_N_CS	O	L act	SPI flash memory chip select output (L: select)
142	P2	PG2/SCK	BF_SPI_SCK	O	Clock	SPI clock
143	P7	VDDMEM				
144	P8	VDDMEM				
145	P9	VDDMEM				
146	P10	VDDMEM				
147	P11	VDDMEM				
148	P12	VDDINT				
149	P13	VDDINT				
150	P14	VDDINT				
151	P19	ARDY	---	I	H act	
152	P20	SCKE	BF_SCKE	O	H act	SDRAM CKE



Pin No.		Port Name	Function Name	ON		Detail of Function
				I/O	Logic	
153	R1	TDI	BF_JTAG_TDI	I	Data	ICE Debug TDI
154	R2	PG0/HWAIT	BF_JTAG_N_INT	I	Inter- rupt	SDRAM chip select
155	R19	/SMS	BF_N_SMS	O	L act	
156	R20	VDDOTP				
157	T1	TDO	BF_JTAG_TDO	O	Data	ICE Debug TDO
158	T2	/EMU	BF_JTAG_N_EMU	O	Data	ICE Debug /EMU
159	T19	/SRAS	BF_N_SRAS	O	L act	SDRAM /RAS
160	T20	/SWE	BF_N_SWE	O	L act	SDRAM /WE
161	U1	TRST	BF_JTAG_N_TRST	I	L act	ICE Debug /TRST
162	U2	TMS	BF_JTAG_TMS	O	Data	ICE Debug TMS
163	U19	SA10	BF_SA10	O	Data	SDRAM A10
164	U20	/SCAS	BF_N_SCAS	O	L act	SDRAM /CAS
165	V1	DATA15	BF_D[15]	B	Data	Data bus bit 15
166	V2	TCK	BF_JTAG_TCK	I	Clock	
167	V19	/ABE0/SDQM0	BF_SDQM0	O	H act	SDRAM DQM0
168	V20	/ABE1/SDQM1	BF_SDQM1	O	H act	SDRAM DQM1
169	W1	DATA14	BF_D[14]	B	Data	Data bus bit 14
170	W2	DATA13	BF_D[13]	B	Data	Data bus bit 13
171	W3	DATA11	BF_D[11]	B	Data	Data bus bit 11
172	W4	DATA9	BF_D[9]	B	Data	Data bus bit 9
173	W5	DATA7	BF_D[7]	B	Data	Data bus bit 7
174	W6	DATA5	BF_D[5]	B	Data	Data bus bit 5
175	W7	DATA3	BF_D[3]	B	Data	Data bus bit 3
176	W8	DATA1	BF_D[1]	B	Data	Data bus bit 1
177	W9	BMODE3	BMODE3			Boot mode select 3
178	W10	BMODE1	BMODE1			Boot mode select 1
179	W11	ADDR18	BF_A[18]	O	Data	Address bus bit 18
180	W12	ADDR16	BF_A[16]	O	Data	Address bus bit 16
181	W13	ADDR14	BF_A[14]	O	Data	Address bus bit 14
182	W14	ADDR12	BF_A[12]	O	Data	Address bus bit 12
183	W15	ADDR10	BF_A[10]	O	Data	Address bus bit 10
184	W16	ADDR8	BF_A[8]	O	Data	Address bus bit 8
185	W17	ADDR6	BF_A[6]	O	Data	Address bus bit 6
186	W18	ADDR4	BF_A[4]	O	Data	Address bus bit 4
187	W19	ADDR2	BF_A[2]	O	Data	Address bus bit 2
188	W20	ADDR1	BF_A[1]	O	Data	Address bus bit 1
189	Y1	GND				
190	Y2	DATA12	BF_D[12]	B	Data	Data bus bit 12
191	Y3	DATA10	BF_D[10]	B	Data	Data bus bit 10
192	Y4	DATA8	BF_D[8]	B	Data	Data bus bit 8
193	Y5	DATA6	BF_D[6]	B	Data	Data bus bit 6
194	Y6	DATA4	BF_D[4]	B	Data	Data bus bit 4
195	Y7	DATA2	BF_D[2]	B	Data	Data bus bit 2
196	Y8	DATA0	BF_D[0]	B	Data	Data bus bit 0
197	Y9	BMODE2	GND			
198	Y10	BMODE0	+3.3V			
199	Y11	ADDR19	BF_A[19]	O	Data	Address bus bit 19
200	Y12	ADDR17	---			
201	Y13	ADDR15	---			
202	Y14	ADDR13	BF_A[13]	O	Data	Address bus bit 13
203	Y15	ADDR11	---			
204	Y16	ADDR9	BF_A[9]	O	Data	Address bus bit 9
205	Y17	ADDR7	BF_A[7]	O	Data	Address bus bit 7
206	Y18	ADDR5	BF_A[5]	O	Data	Address bus bit 5
207	Y19	ADDR3	BF_A[3]	O	Data	Address bus bit 3
208	Y20	GND				

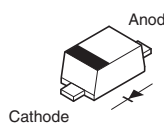
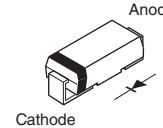
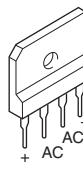
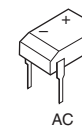
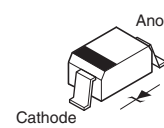
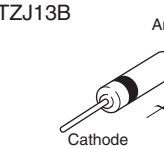
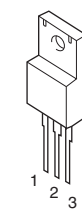
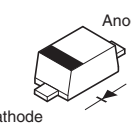
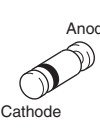
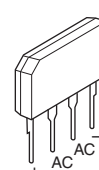
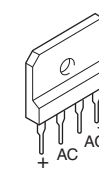
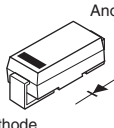
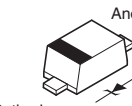
## PIN CONNECTION DIAGRAMS

### ICs






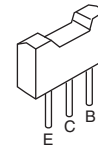
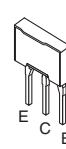

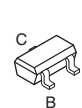
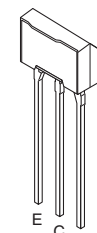
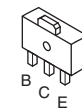
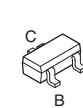

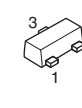
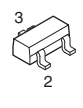
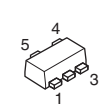

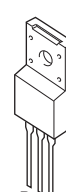

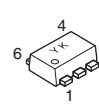
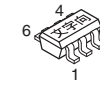
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<div>TC7WH126FU TC7WHU04FU</div> <div></div>	<div>TC7WZ32FK (TE85L, F)</div> <div></div>	<div>TL431ACLPR</div> <div></div> <div>1: CATHODE 2: ANODE 3: REF</div>	<div>TMDS141RHAR</div> <div></div> <div></div>	<div>W25Q128BVF1G</div> <div></div>	

## • Diodes

1SS355 1SS355VMTE-17	D1FL20U-5063	D6SBN20	DBL155G	HZU4.3B3 TRF-E	MTZJ2.4B MTZJ5.1C MTZJ6.8C MTZJ13B	
						
RB215T-90	RB501V-40 RB521S-30	RLZ7.5B 7.5V	RS203M-B-C-J80	RS603M-B-C-J80	SARS05	UDZS12B 12V UDZS36B 36V UDZS5.1B 5.1V
						

## • Transistors

2SA1015-Y 2N5401C-AT/P 	2N5551C-AT 	2SA1312-GR,BL 	2SA1576A 	2SA1695 O,P,Y 2SC4468 O,P,Y 	2SA1708 	2SA1770S/T-AN 	2SA949 2SC1815 Y 2SC2229 
2SC3324-GR,BL 2SC3906K 2SC4081 T106 	2SC4614S/T-AN 	2SC5964-TD-E 	2SD2704 K 	2SD2705S TP 	DTA043EUBTL DTA044EUBTL DTC044EUBTL  1: IN 2: GND 3: OUT	DTA114EKA DTC114EKA DTC144EKA  1: GND 2: IN 3: OUT	
HN4B01JE  1. BASE1 2. EMITTER 3. BASE2 4. COLLECTOR2 5. COLLECTOR1	KRA102M-AT/P KRC102M-AT 	KTA1046-Y-U/P KTA1837-U/P 	KTA1504S KTC3875S 	MCH6336-TL-E  1. Drain 2. Drain 3. Gate 4. Source 5. Drain 6. Drain	μPA672T-T1-A  1. Source 1 (S1) 2. Gate 1 (G1) 3. Drain 2 (D2) 4. Source 2 (S2) 5. Gate 2 (G2) 6. Drain 1 (D1)		

BLOCK DIAGRAMS

AUDIO Section Block Diagram

DIGITAL • See page 127–134 → SCHEMATIC DIAGRAM

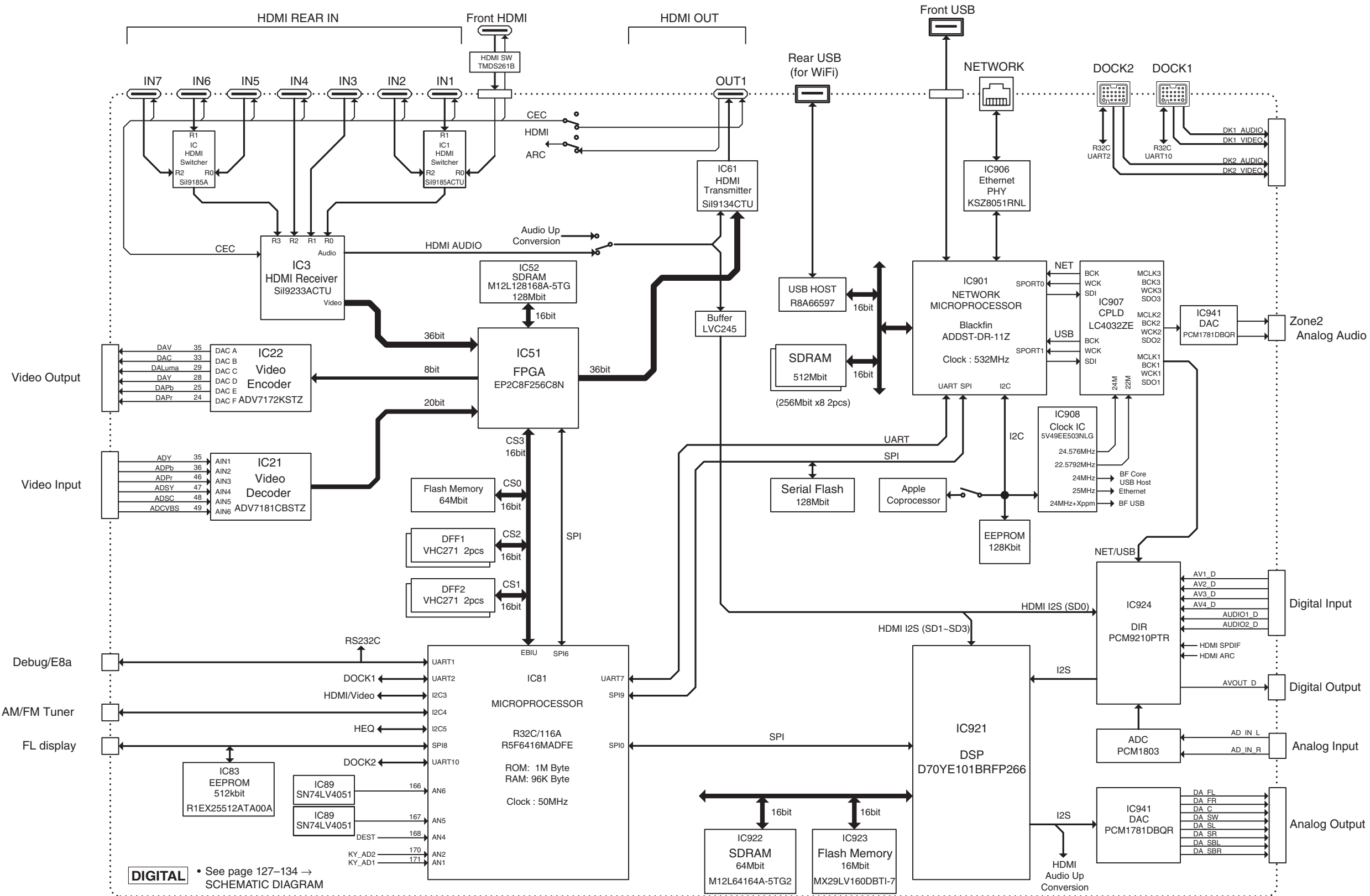
VIDEO • See page 141–146 → SCHEMATIC DIAGRAM

OPERATION • See page 135–138 → SCHEMATIC DIAGRAM

MAIN • See page 139, 140 → SCHEMATIC DIAGRAM

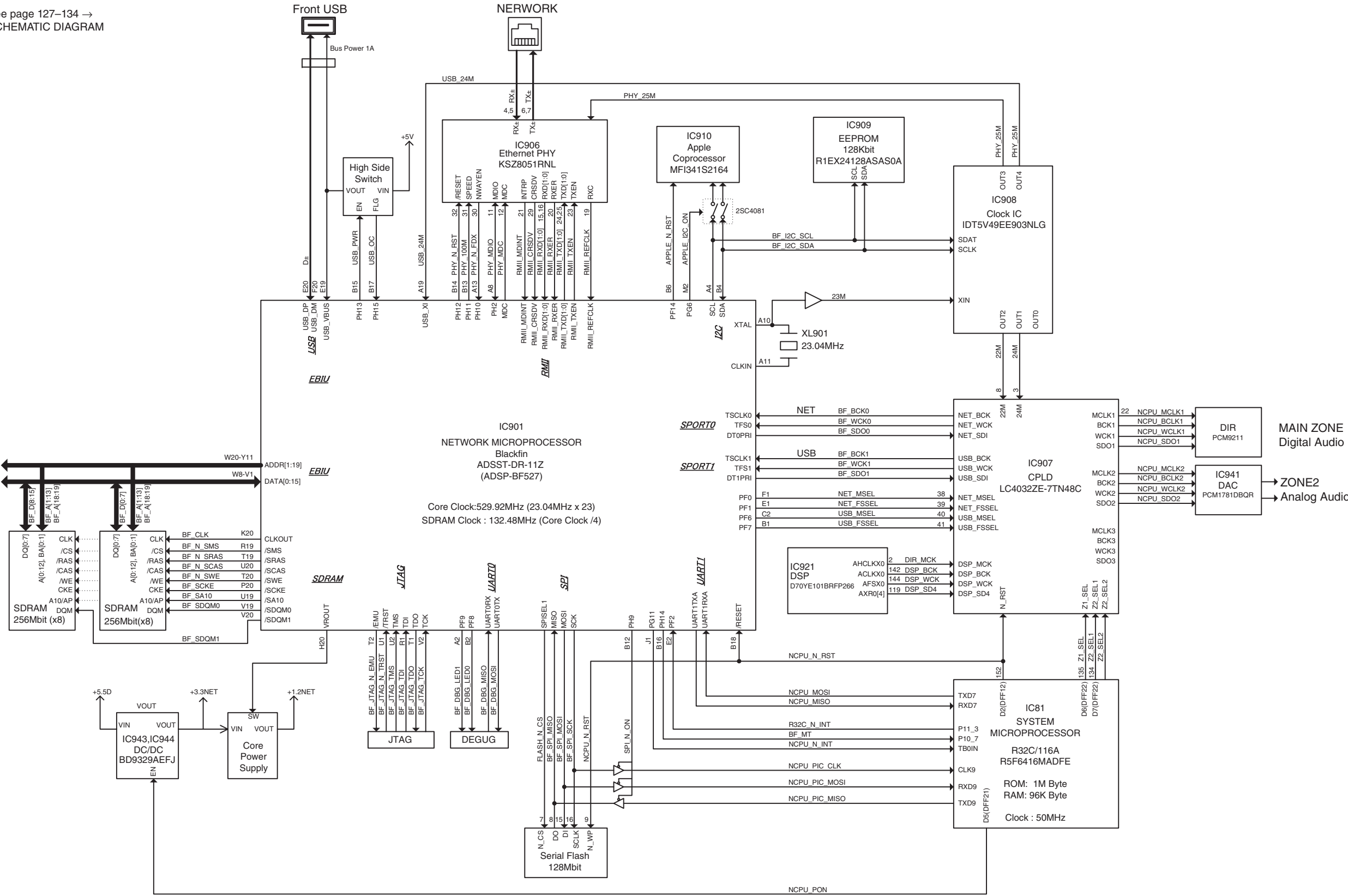
VIDEO • See page 141–146 → SCHEMATIC DIAGRAM

DIGITAL P.C.B. Section Block Diagram



NET/USB Section Block Diagram

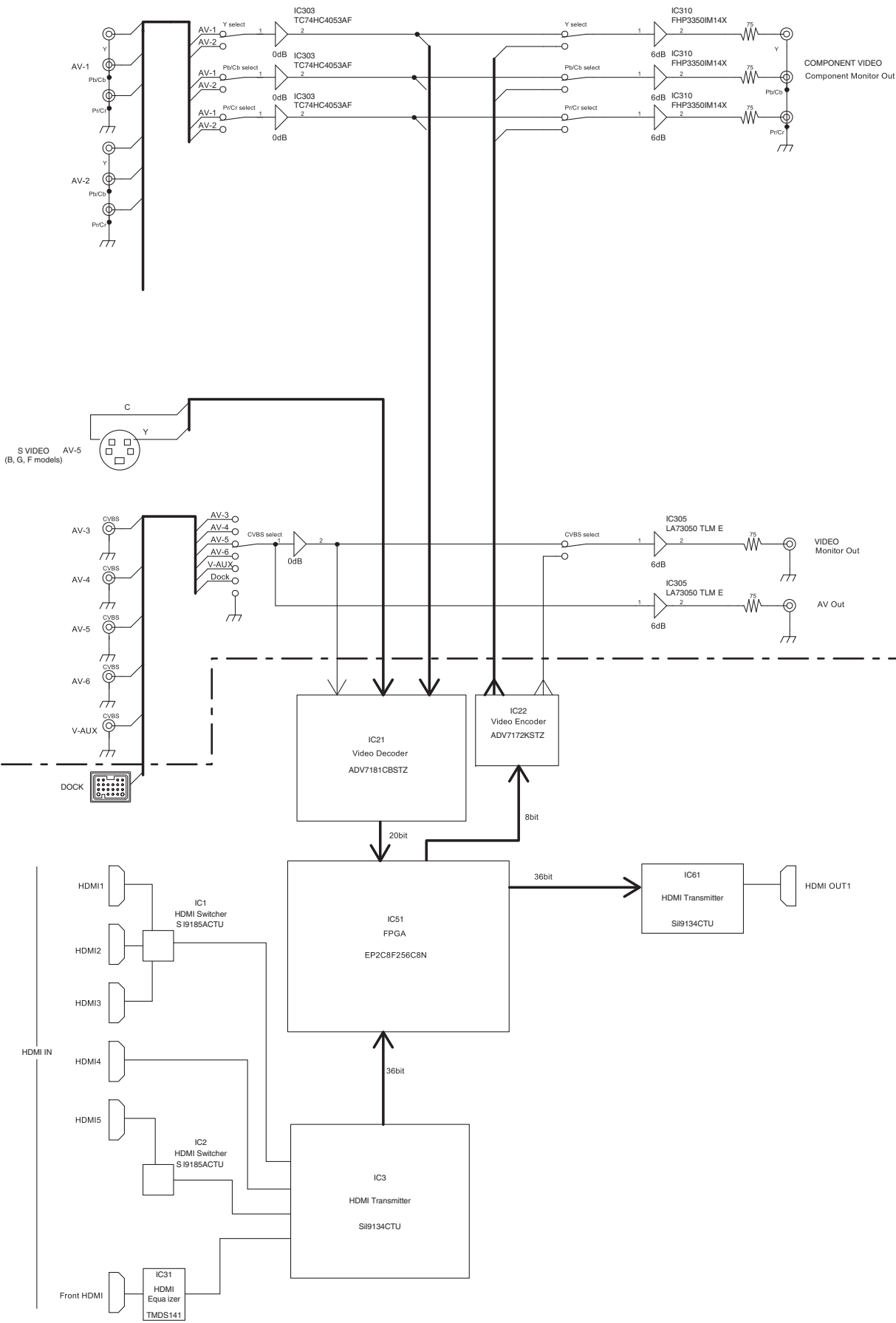
**DIGITAL** • See page 127–134 → SCHEMATIC DIAGRAM



**VIDEO** • See page 141–146 →  
SCHEMATIC DIAGRAM

**DIGITAL** • See page 127–134 →  
SCHEMATIC DIAGRAM

VIDEO Section Block Diagram





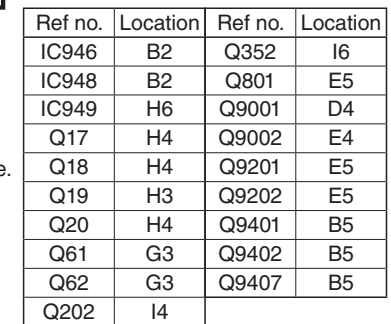
Power Supply Section Block Diagram

**VIDEO** • See page 141–146 → SCHEMATIC DIAGRAM

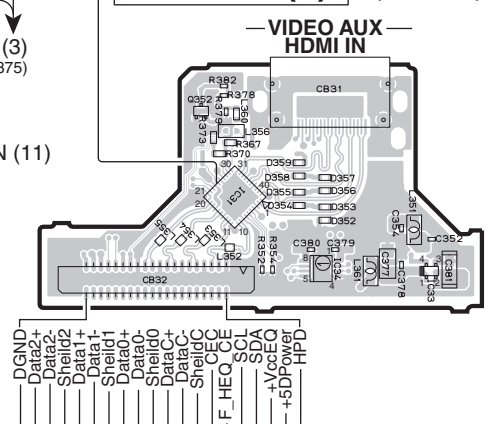
**DIGITAL** • See page 127–134 → SCHEMATIC DIAGRAM

**OPERATION** • See page 135–138 → SCHEMATIC DIAGRAM

**DIGITAL (1)** (Side A)



**DIGITAL (2)** (Side A)



• Semiconductor Location			
Ref no.	Location	Ref no.	Location
D352	J6	IC1	F3
D353	J6	IC2	I3
D354	J6	IC3	G3
D355	J6	IC5	H3
D356	J6	IC6	H3
D357	J6	IC7	H3
D358	J6	IC21	H4
D359	J6	IC22	I3
D601	D2	IC23	H4
D602	D2	IC24	G4
D9402	H6	IC25	G4
D9403	H5	IC26	I4
D9404	H6	IC27	I4
D9405	H6	IC31	I6
D9406	H6	IC33	J7

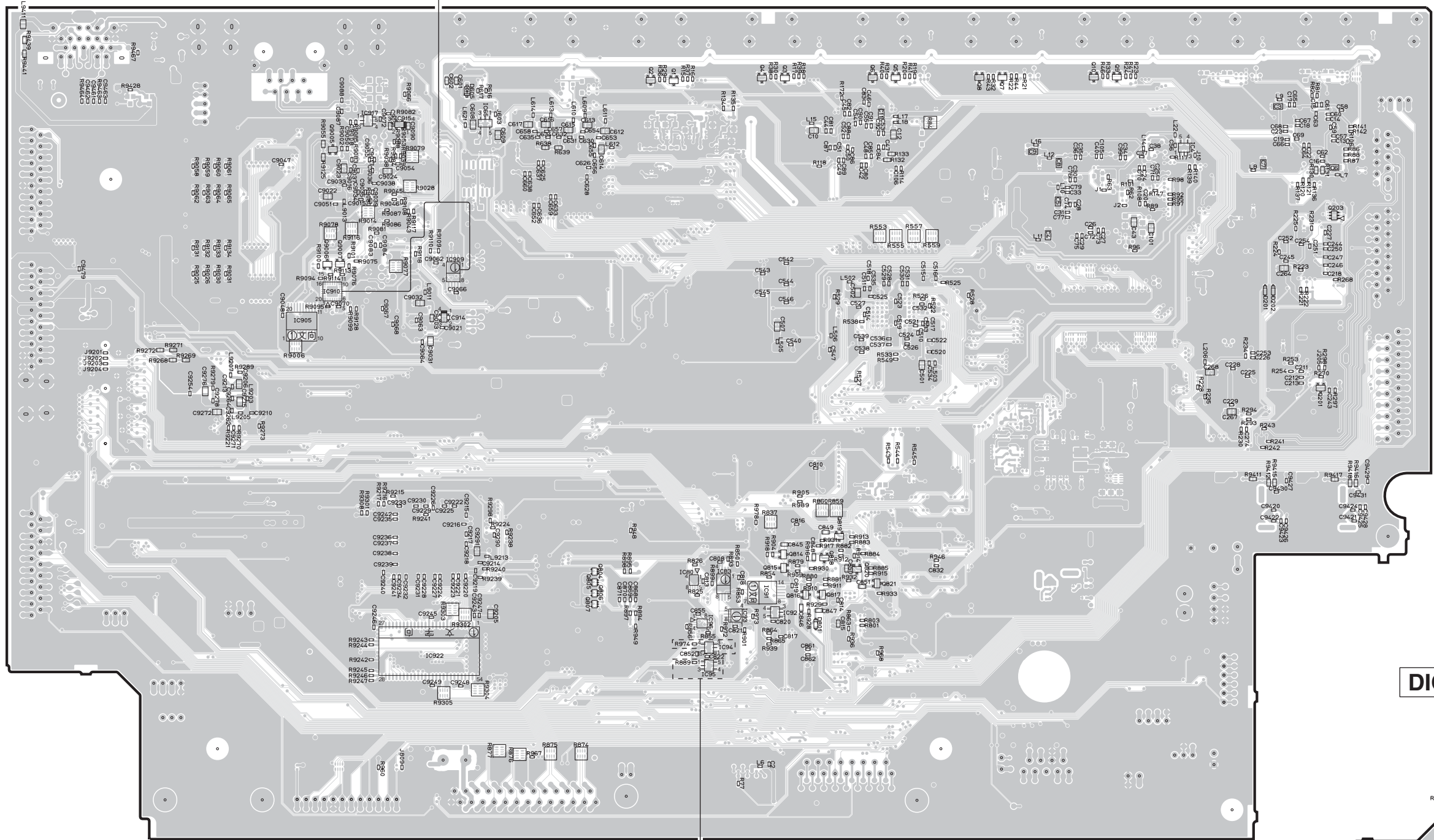


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DIGITAL (1) (Side B)

No replacement part available.

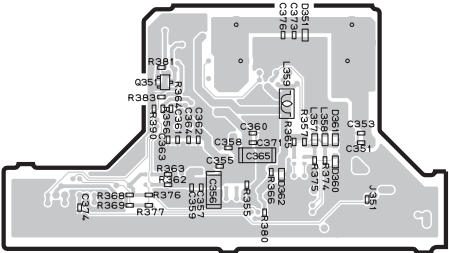


U model

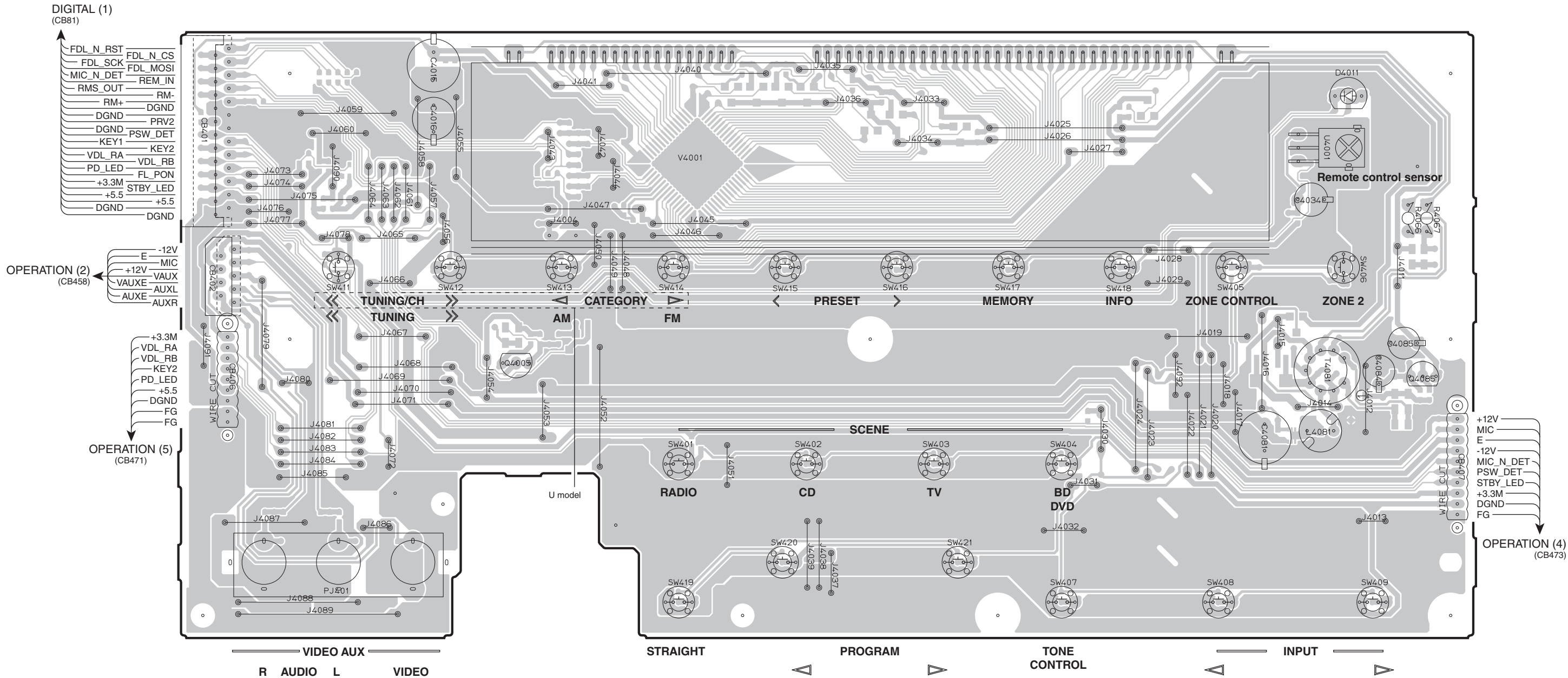
• Semiconductor Location

Ref no.	Location	Ref no.	Location
D201	H4	Q3	E2
D202	H4	Q4	E2
D351	I6	Q5	F2
D360	I6	Q6	F2
D361	I6	Q7	F2
D362	I7	Q8	F2
D605	C2	Q9	G2
D801	E5	Q10	G2
IC4	G3	Q201	H4
IC65	D3	Q203	H3
IC80	E5	Q351	I6
IC83	E5	Q804	D5
IC91	E5	Q805	D5
IC92	E5	Q806	D5
IC93	E5	Q807	D5
IC94	E5	Q814	E5
IC95	E6	Q815	E5
IC96	E5	Q816	E5
IC905	C4	Q817	E5
IC909	C3	Q818	E5
IC910	C4	Q819	E5
IC914	C4	Q820	F5
IC915	C3	Q821	F5
IC917	C3	Q9005	C3
IC922	C5	Q9006	C3
Q1	E2	Q9007	C3
Q2	D2		

DIGITAL (2) (Side B)



OPERATION (1) (Side A)

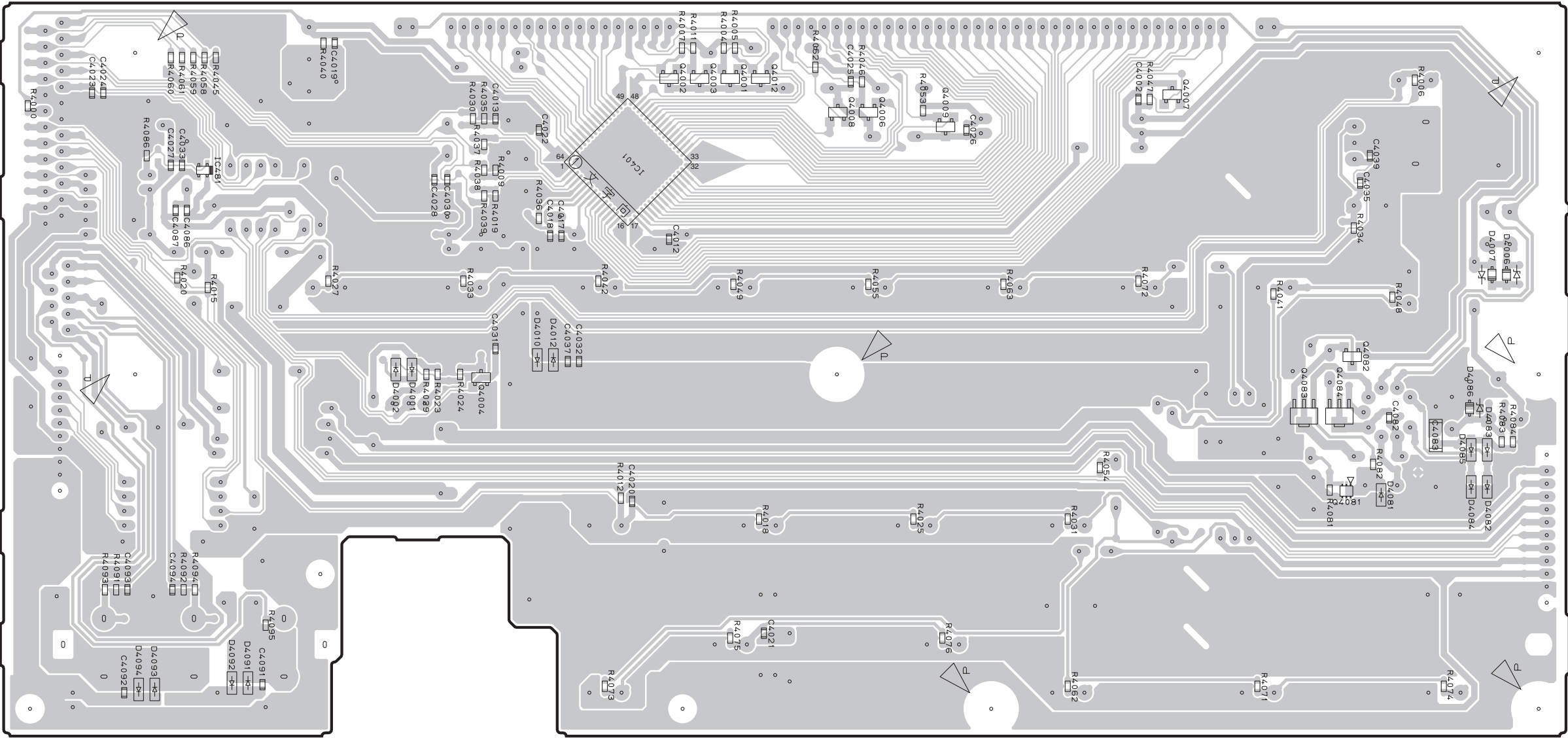


• Semiconductor Location

Ref no.	Location
D4011	I3
Q4005	D4
Q4085	J4

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OPERATION (1) (Side B)



• Semiconductor Location

Ref no.	Location	Ref no.	Location	Ref no.	Location	Ref no.	Location
D4001	C4	D4083	I4	IC401	E3	Q4008	F3
D4002	C4	D4084	I5	IC481	B3	Q4009	F3
D4006	I4	D4085	I4	Q4001	E3	Q4012	E3
D4007	I4	D4086	I4	Q4002	E3	Q4081	H5
D4010	D4	D4091	C6	Q4003	E3	Q4082	H4
D4012	D4	D4092	C6	Q4004	D4	Q4083	H4
D4081	H5	D4093	B6	Q4006	F3	Q4084	H4
D4082	I5	D4094	B6	Q4007	G3		



OPERATION (1)  
(CB402)

DIGITAL (1)  
(CB945)

DIGITAL (1)  
(CB944)

DIGITAL (1)  
(CB943)

R_200_DET	MODEL
MUTE_SB	MUTE_5CH
N.C.	N.C.
N.C.	N.C.
N.C.	N.C.
DSP_SCK	DSP_MOSI
SR_PON5	DAC1_N_CS
N.C.	DGND
DGND	N.C.
DA_SD_SR	DA_SD_SR

DGND	DA_MCK
DGND	DA_SD_F
DA_BCK	DA_WCK
DA_SD_CSW	+3.3DSP
+3.3DSP	Z2_DA_R
Z2_DA_E	Z2_DA_L
AGND	ADR
ADL	+5A
N.C.	N.C.
N.C.	N.C.

+5DSP	N.C.
N.C.	N.C.
AV/3_D	AV/4_D
AV/3_D	AV/2_D
AV/1_D	N.C.
DGND	N.C.
N.C.	N.C.
IPV	IPVE
IPR	IPE
IPL	RSENS
SR MOS15	SR MISO5

**SIRIUS**

E, R, T, A, B, G, F, L, S models

T, A, B, G, F, L, S models

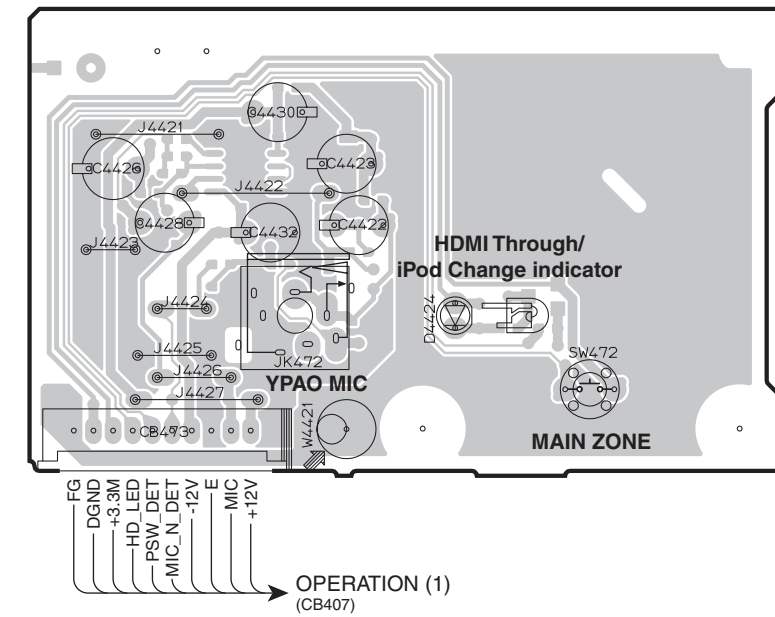
Diagram of the rear panel of a CB383 video cassette recorder. It shows a 'WIRE CUT' section with pins for -12V, +12V, PHL, PHR, and PHE. Below this is a 'VIDEO (10)' input section labeled '(CB383)' and '(R, T, A, B, G, F, L, S models)'.

- Semiconductor Location

Ref no.	Location
IC457	G4



**OPERATION (4)** (Side A)



**OPERATION (6)** (Side A)

- Semiconductor Location

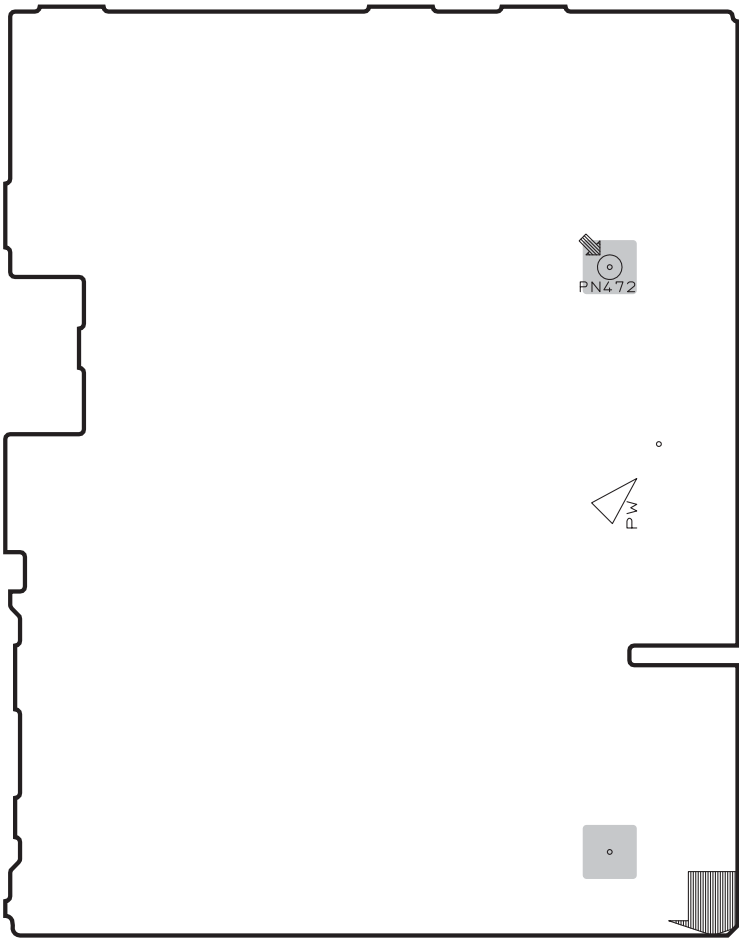
Ref no.	Location
D4401	C6
D4424	H3



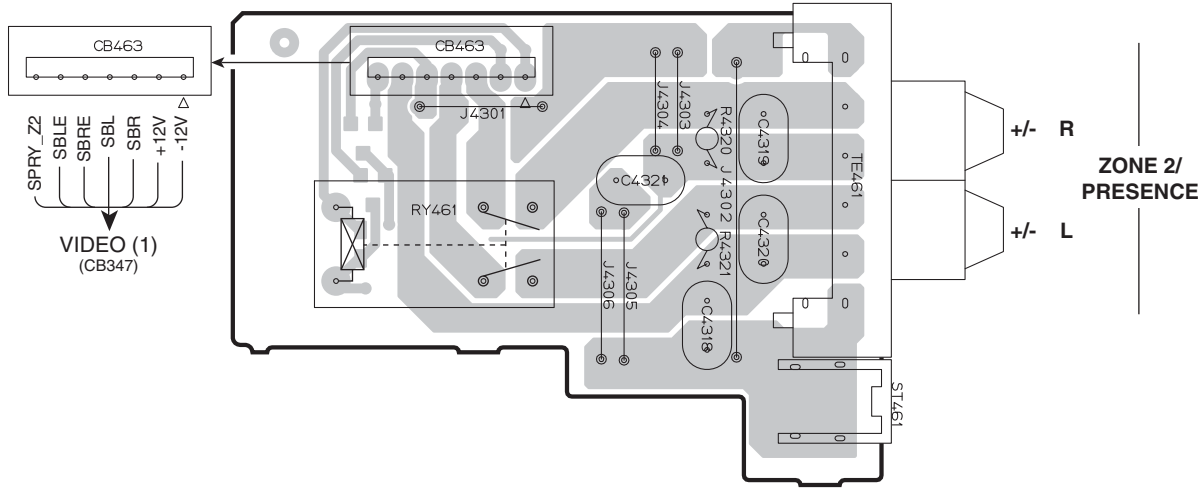




OPERATION (7) (Side A)

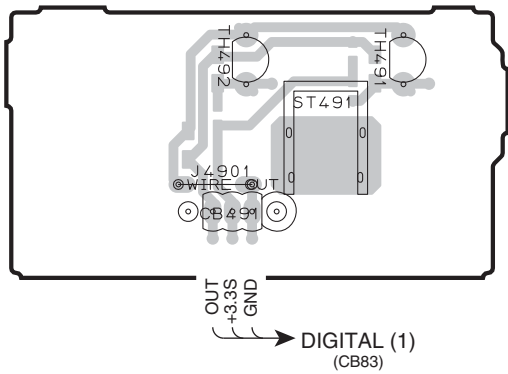


OPERATION (8) (Side A)



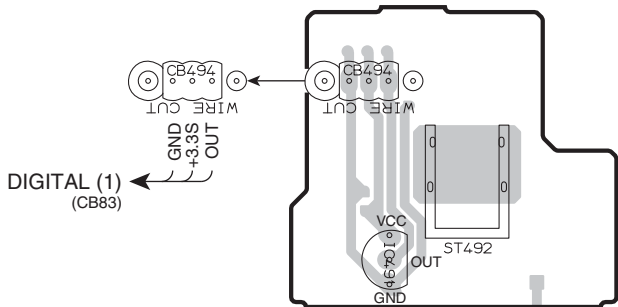
OPERATION (9) (Side A)

U, C models

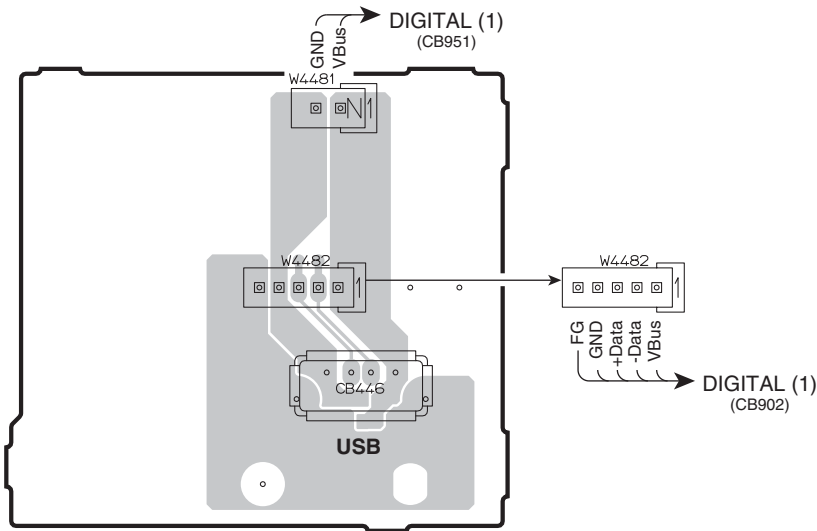


OPERATION (10) (Side A)

R, T, A, B, G, F, L, S models



OPERATION (11) (Side A)

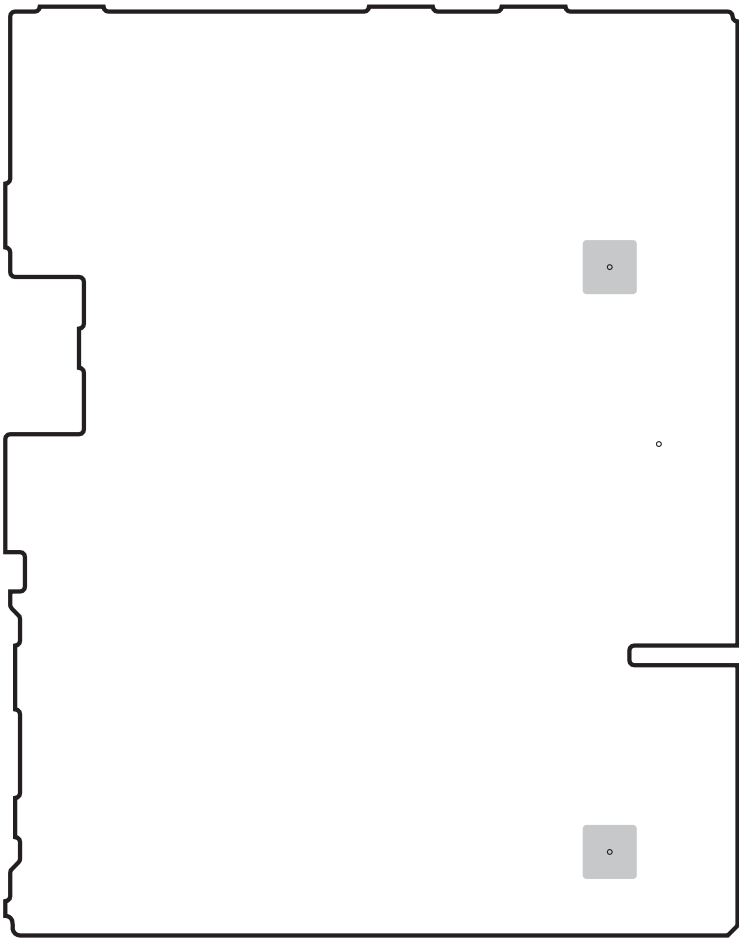


• Semiconductor Location

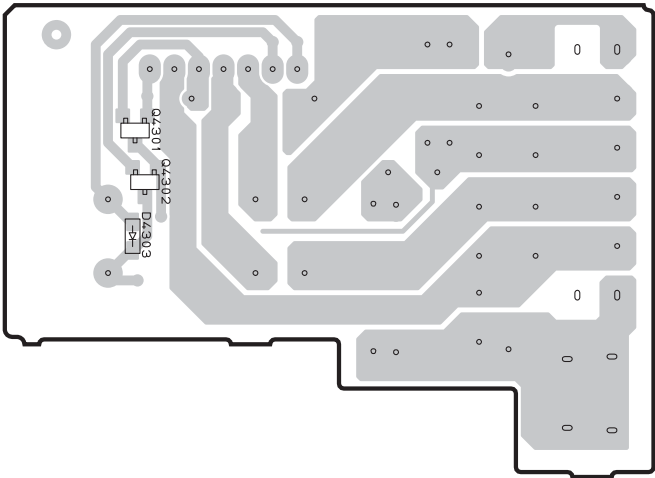
Ref no.	Location
IC491	E7

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OPERATION (7) (Side B)

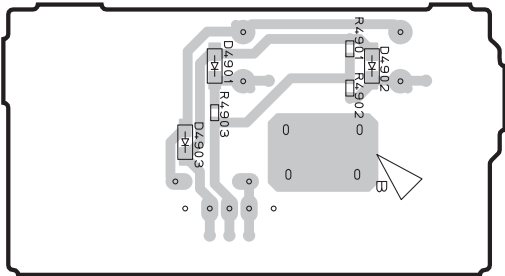


OPERATION (8) (Side B)



OPERATION (9) (Side B)

U, C models

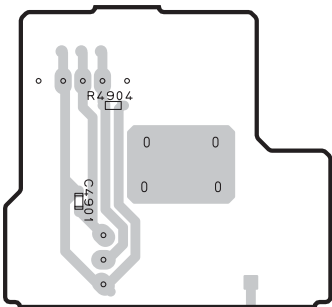


• Semiconductor Location

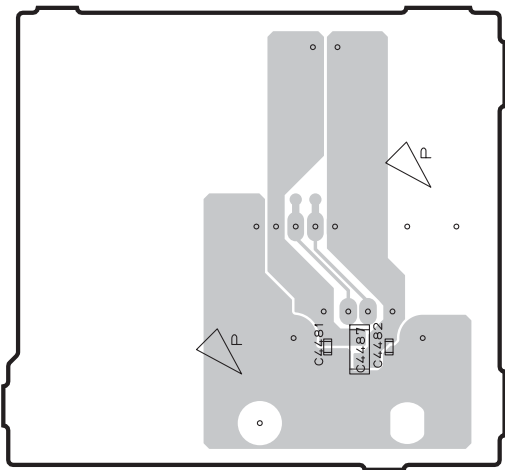
Ref no.	Location
D4303	E3
D4901	I3
D4902	I3
D4903	I3
Q4301	E3
Q4302	E3

OPERATION (10) (Side B)

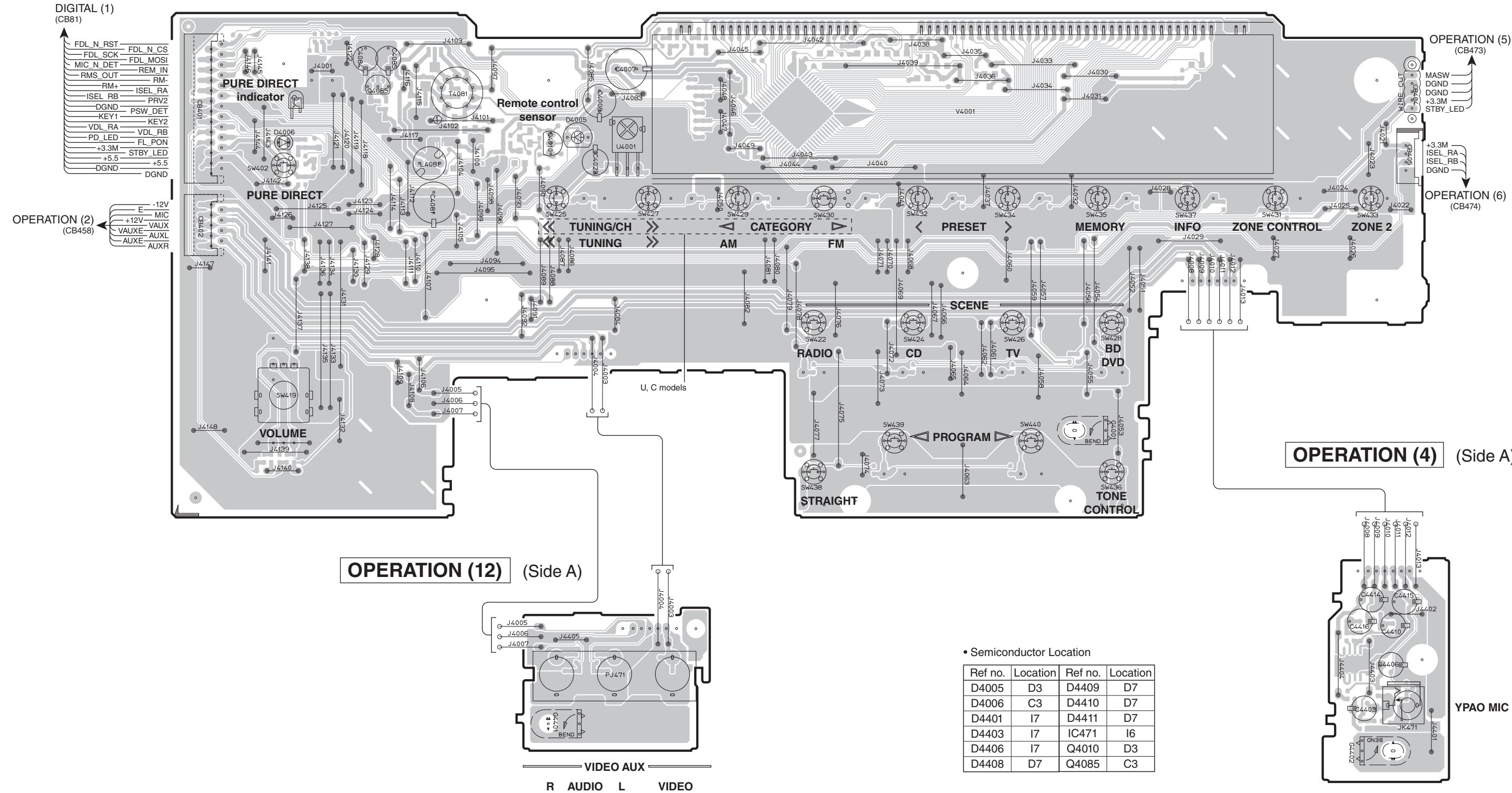
R, T, A, B, G, F, L, S models



OPERATION (11) (Side B)



OPERATION (1) (Side A)



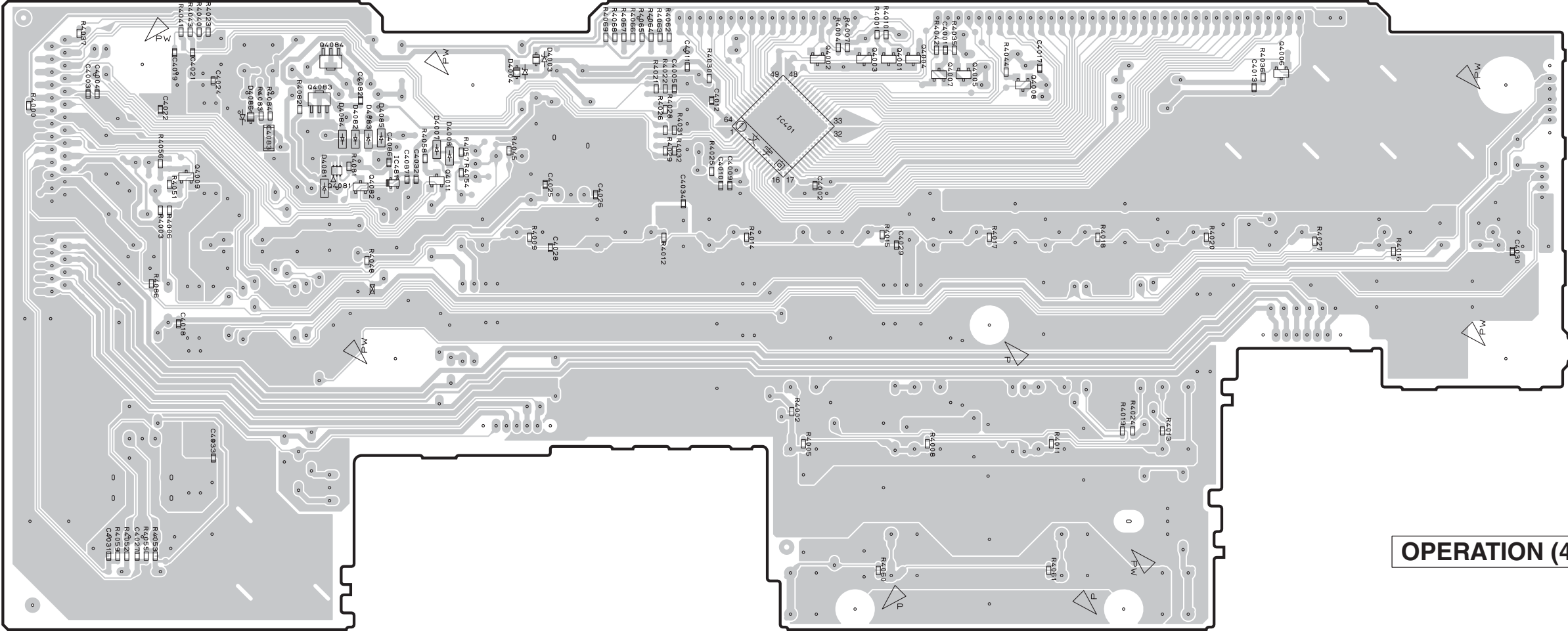
OPERATION (12) (Side A)

OPERATION (4) (Side A)

• Semiconductor Location

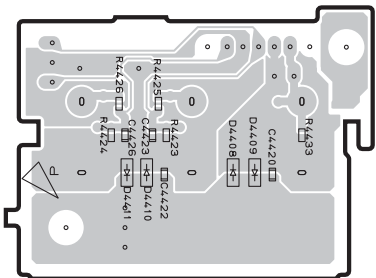
Ref no.	Location	Ref no.	Location
D4005	D3	D4409	D7
D4006	C3	D4410	D7
D4401	I7	D4411	D7
D4403	I7	IC471	I6
D4406	I7	Q4010	D3
D4408	D7	Q4085	C3

## OPERATION (1) (Side B)



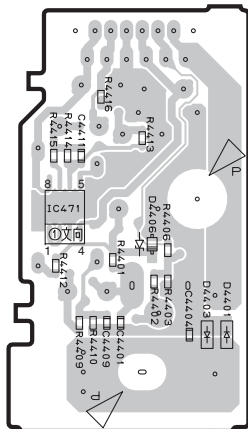
#### OPERATION (4) (Side B)

## OPERATION (12) (Side B)

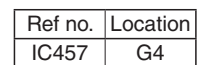


- Semiconductor Location

Ref no.	Location	Ref no.	Location	Ref no.	Location
D4003	D3	D4086	C3	Q4007	F3
D4004	D3	IC401	E3	Q4008	G3
D4007	D3	IC481	C3	Q4009	B3
D4008	D3	Q4001	F3	Q4011	D3
D4081	C3	Q4002	E3	Q4081	C3
D4082	C3	Q4003	F3	Q4082	C3
D4083	C3	Q4004	F3	Q4083	C3
D4084	C3	Q4005	F3	Q4084	C3
D4085	C3	Q4006	H3		



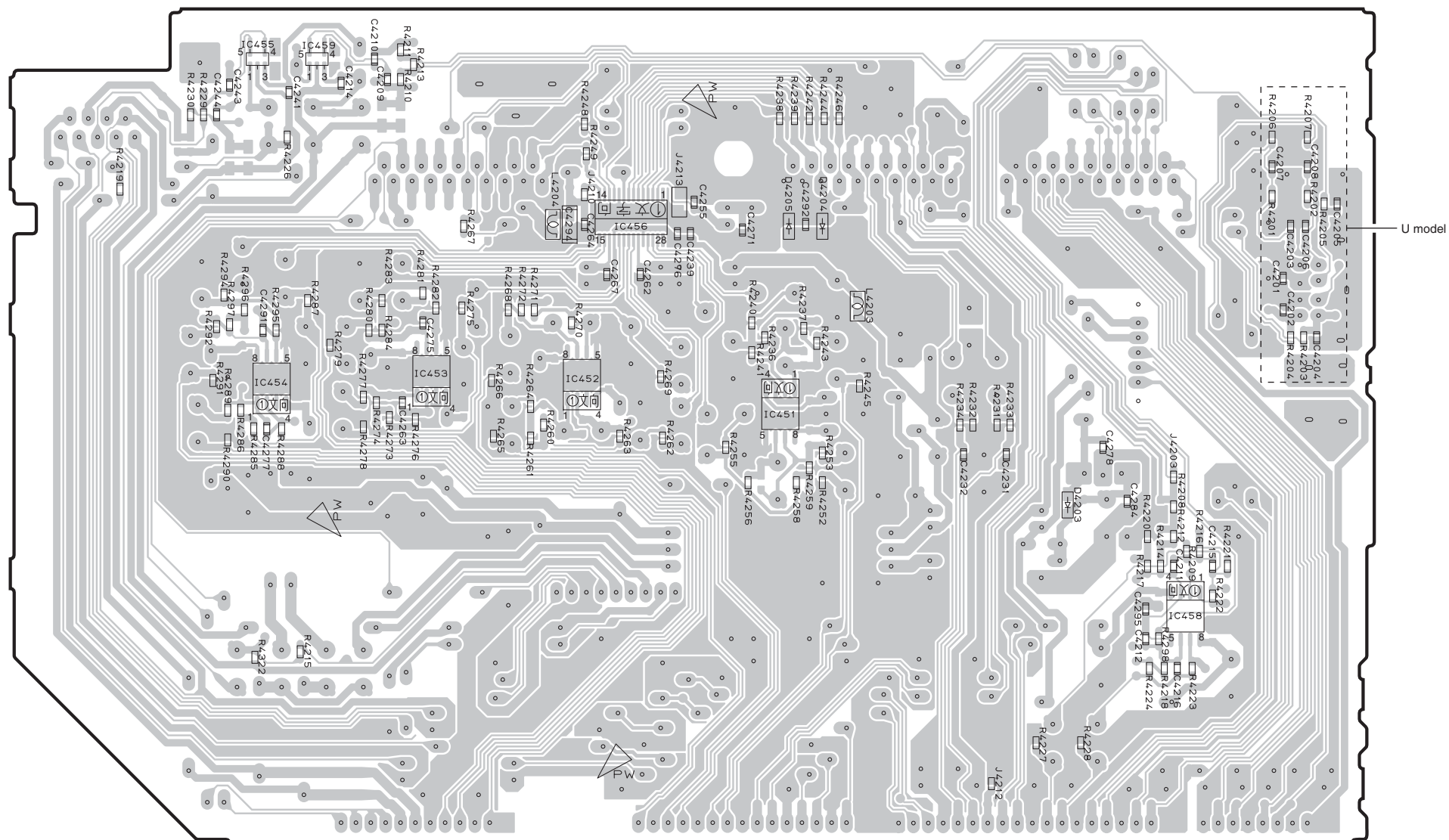
OPERATION (1)  
(CB402)





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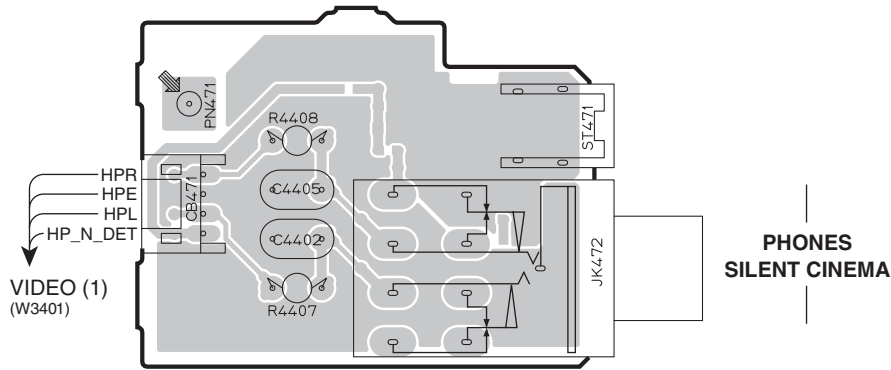
## OPERATION (2) (Side B)



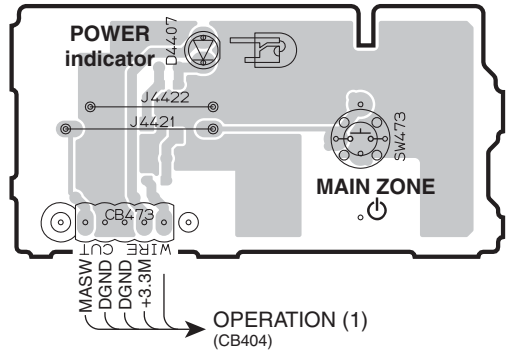
- Semiconductor Location

Ref no.	Location
D4203	G4
D4204	F3
D4205	E3
IC451	E4
IC452	E4
IC453	D4
IC454	C4
IC455	C2
IC456	E3
IC458	G5
IC459	C2

OPERATION (3) (Side A)



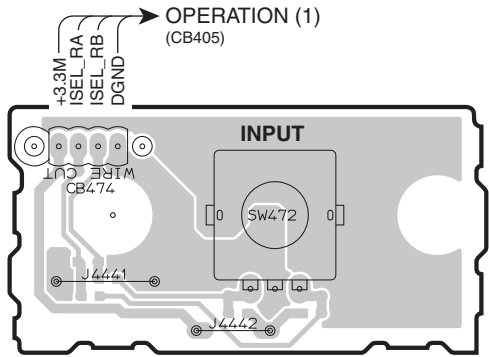
OPERATION (5) (Side A)



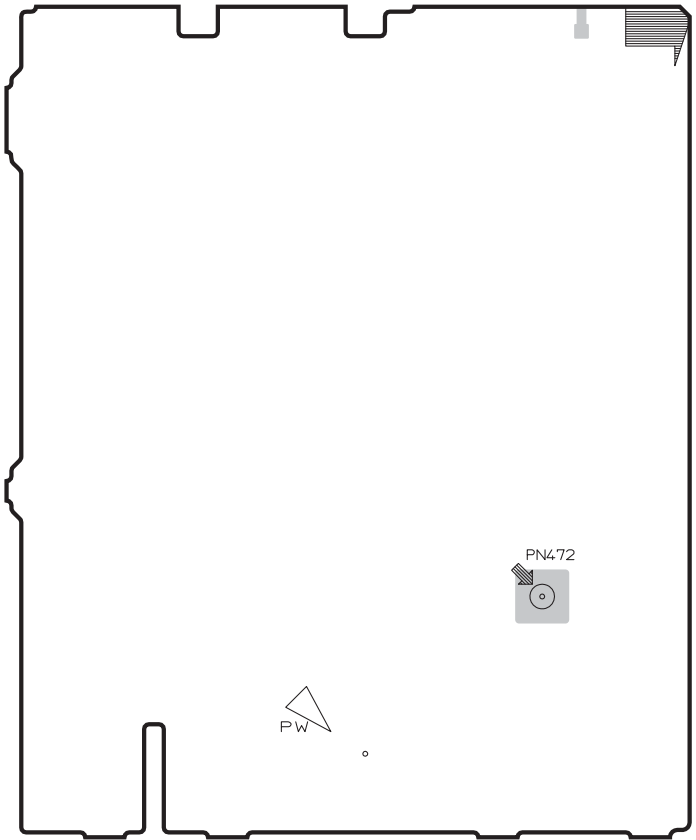
• Semiconductor Location

Ref no.	Location
D4407	H2

OPERATION (6) (Side A)



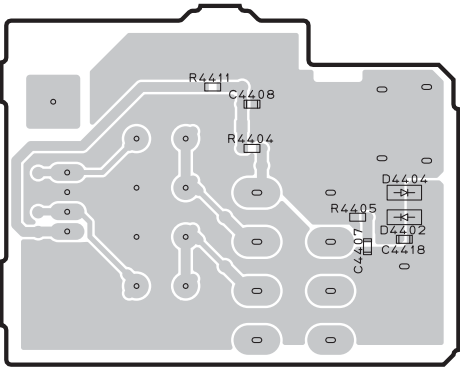
OPERATION (7) (Side A)



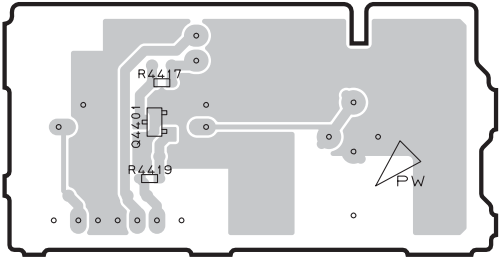


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OPERATION (3) (Side B)



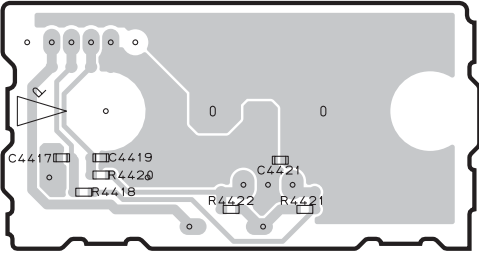
OPERATION (5) (Side B)



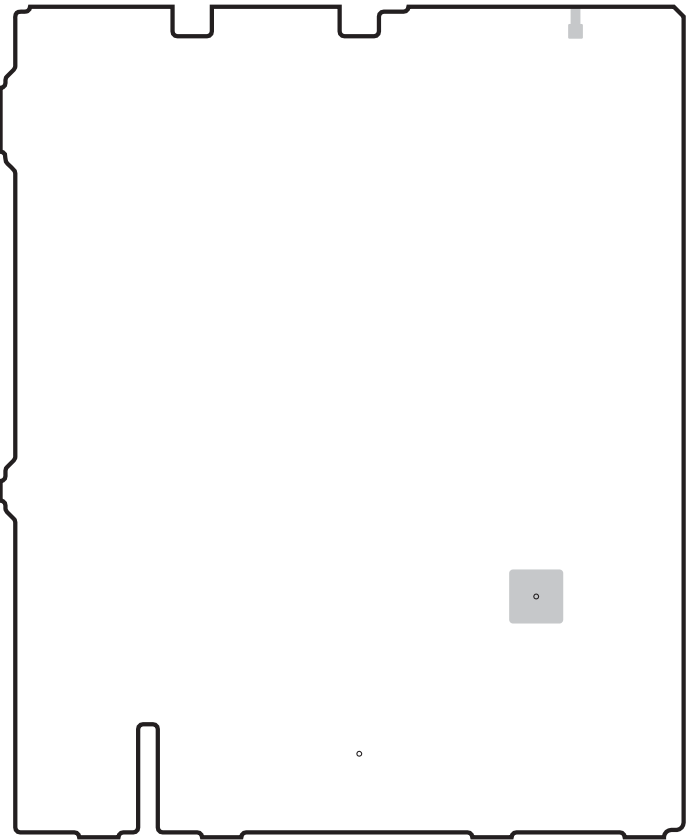
• Semiconductor Location

Ref no.	Location
D4402	C3
D4404	C3
Q4401	G3

OPERATION (6) (Side B)



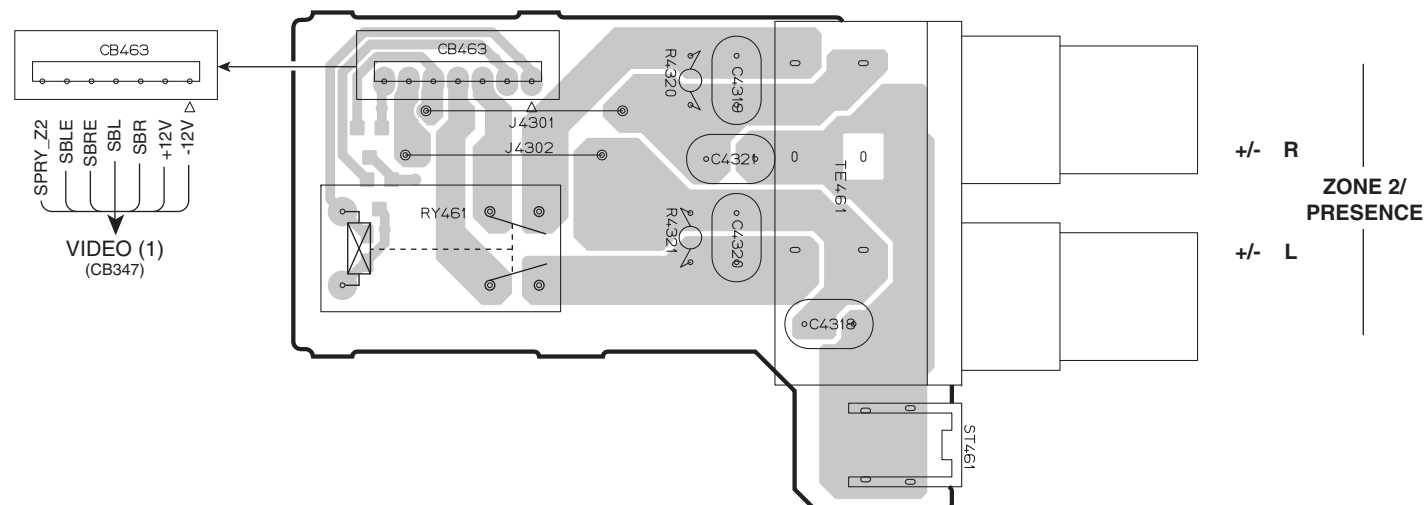
OPERATION (7) (Side B)



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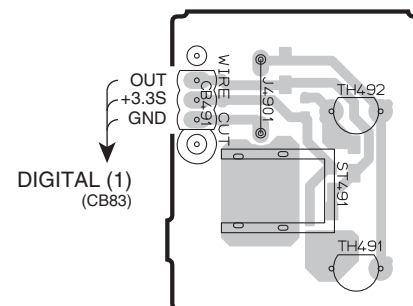
**RX-A710**

**OPERATION (8)**



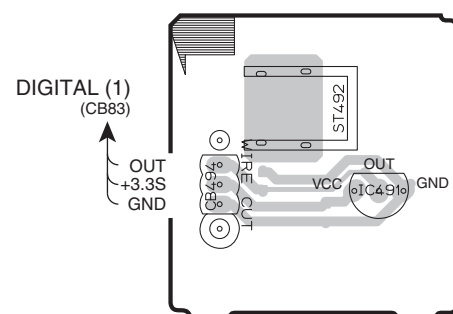
**OPERATION (9)** (Side A)

## U, C models



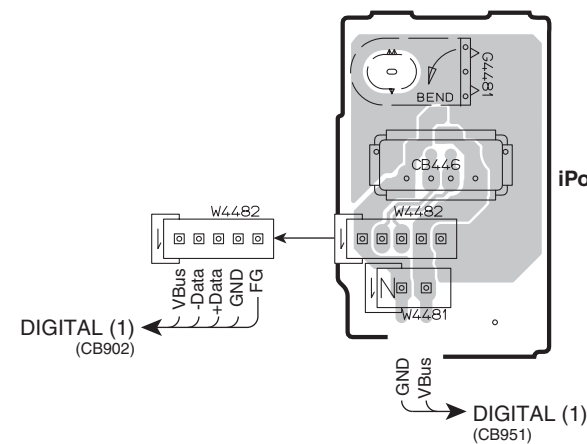
### OPERATION (10) (Side A)

## A model



**OPERATION (11)** (Side A)

**USB  
iPod/iPhone**

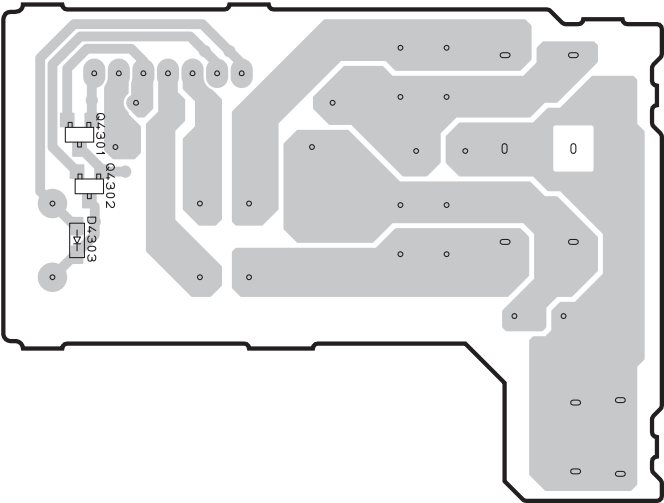


- Semiconductor Location

Ref no.	Location
IC491	D6

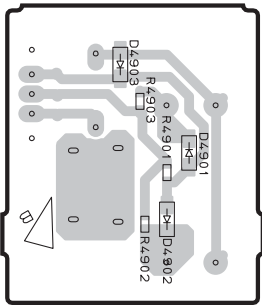
RX-A710

OPERATION (8) (Side B)



OPERATION (9) (Side B)

U, C models

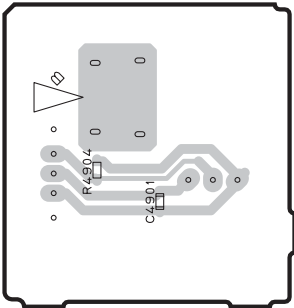


• Semiconductor Location

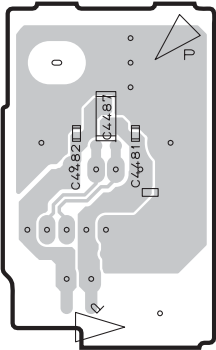
Ref no.	Location
D4303	B3
D4901	G3
D4902	G3
D4903	G2
Q4301	B2
Q4302	B3

OPERATION (10) (Side B)

A model

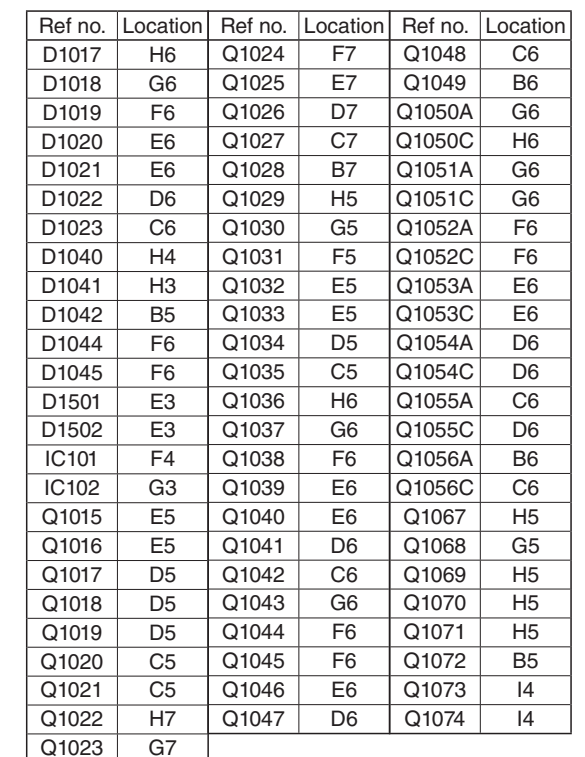


OPERATION (11) (Side B)



— AV1 — AV2 — AV3 — AV4 — AV5 — AV6 — AV — AUDIO1 — AUDIO2  
OUT

OPTICAL COAXIAL COAXIAL OPTICAL  
(CD) (TV)



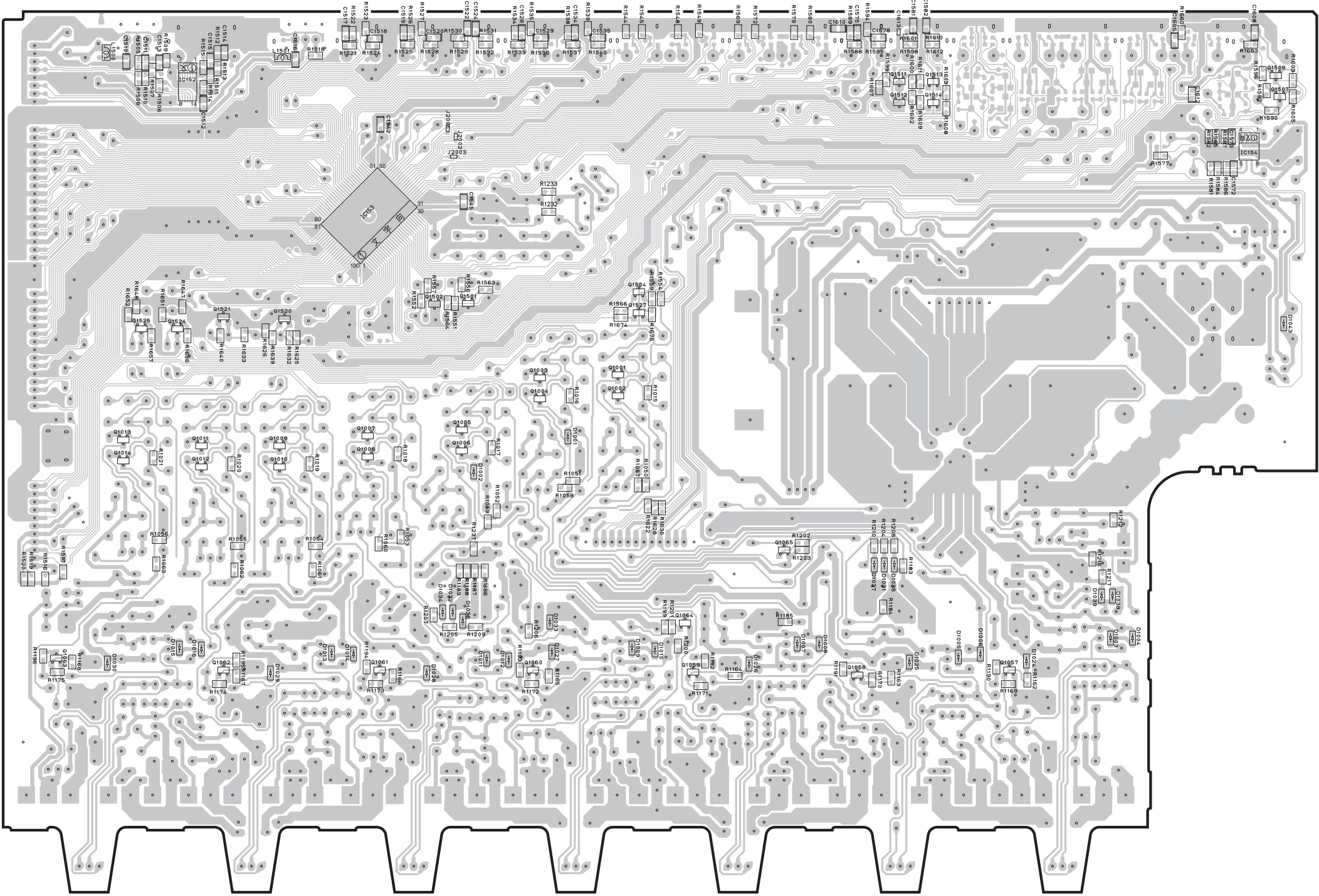
## 110



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MAIN (1) (Side B)

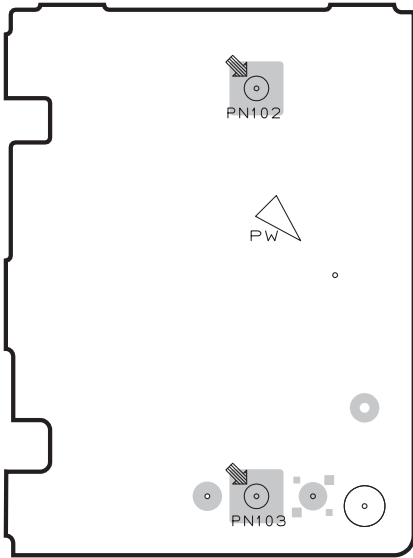
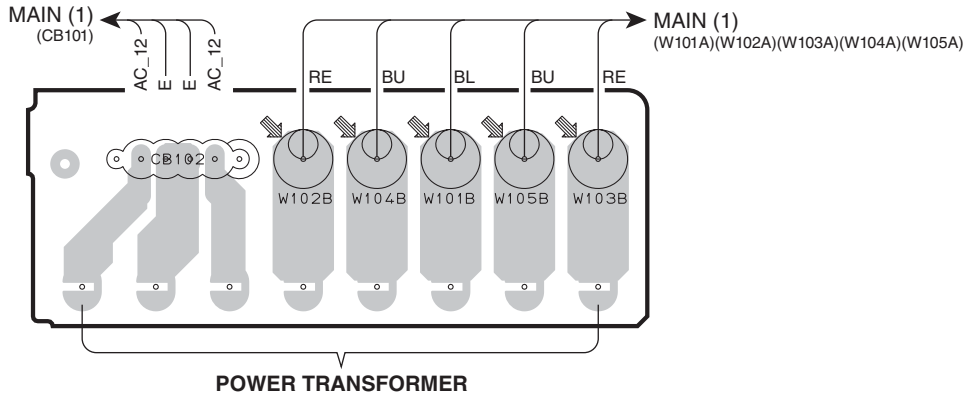


• Semiconductor Location

Ref no.	Location	Ref no.	Location
D1001	D4	Q1002	E4
D1002	D4	Q1003	D4
D1003	G5	Q1004	D4
D1004	G5	Q1005	D4
D1005	G5	Q1006	D4
D1006	G5	Q1007	C4
D1007	F5	Q1008	C4
D1008	F5	Q1009	C4
D1009	E5	Q1010	C4
D1010	E5	Q1011	C4
D1011	D5	Q1012	C4
D1012	D5	Q1013	B4
D1013	C5	Q1014	B4
D1014	C5	Q1057	G5
D1015	B5	Q1058	F6
D1016	C5	Q1059	E6
D1024	G5	Q1060	D6
D1025	F5	Q1061	C6
D1026	E5	Q1062	C6
D1027	D5	Q1063	B5
D1028	D6	Q1064	E5
D1029	C6	Q1065	F5
D1030	B5	Q1501	D4
D1031	F5	Q1502	D4
D1032	D5	Q1504	E4
D1033	D5	Q1507	H2
D1034	D5	Q1509	H2
D1035	F5	Q1511	F2
D1036	D5	Q1512	F2
D1037	F5	Q1513	F2
D1038	G5	Q1514	F2
D1039	G5	Q1520	C4
D1043	H4	Q1521	C4
IC152	B2	Q1524	B4
IC153	C3	Q1525	B4
IC154	H3	Q1527	E4
Q1001	E4		

MAIN (2) (Side A)

MAIN (6) (Side A)

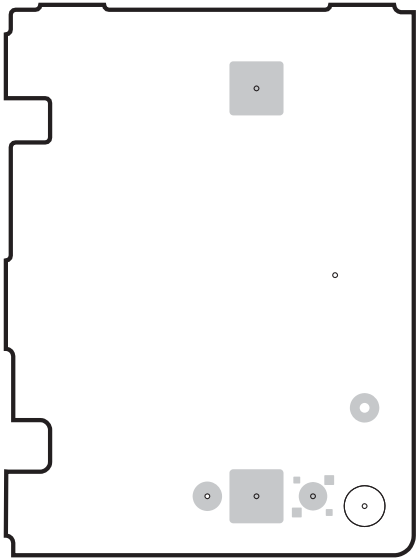
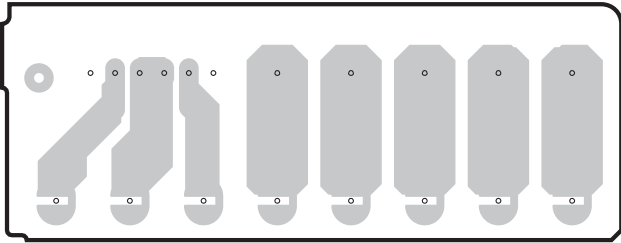


RX-V671/HTR-6064

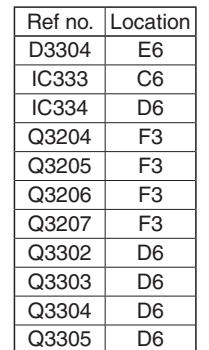
RX-A710

MAIN (2) (Side B)

MAIN (6) (Side B)



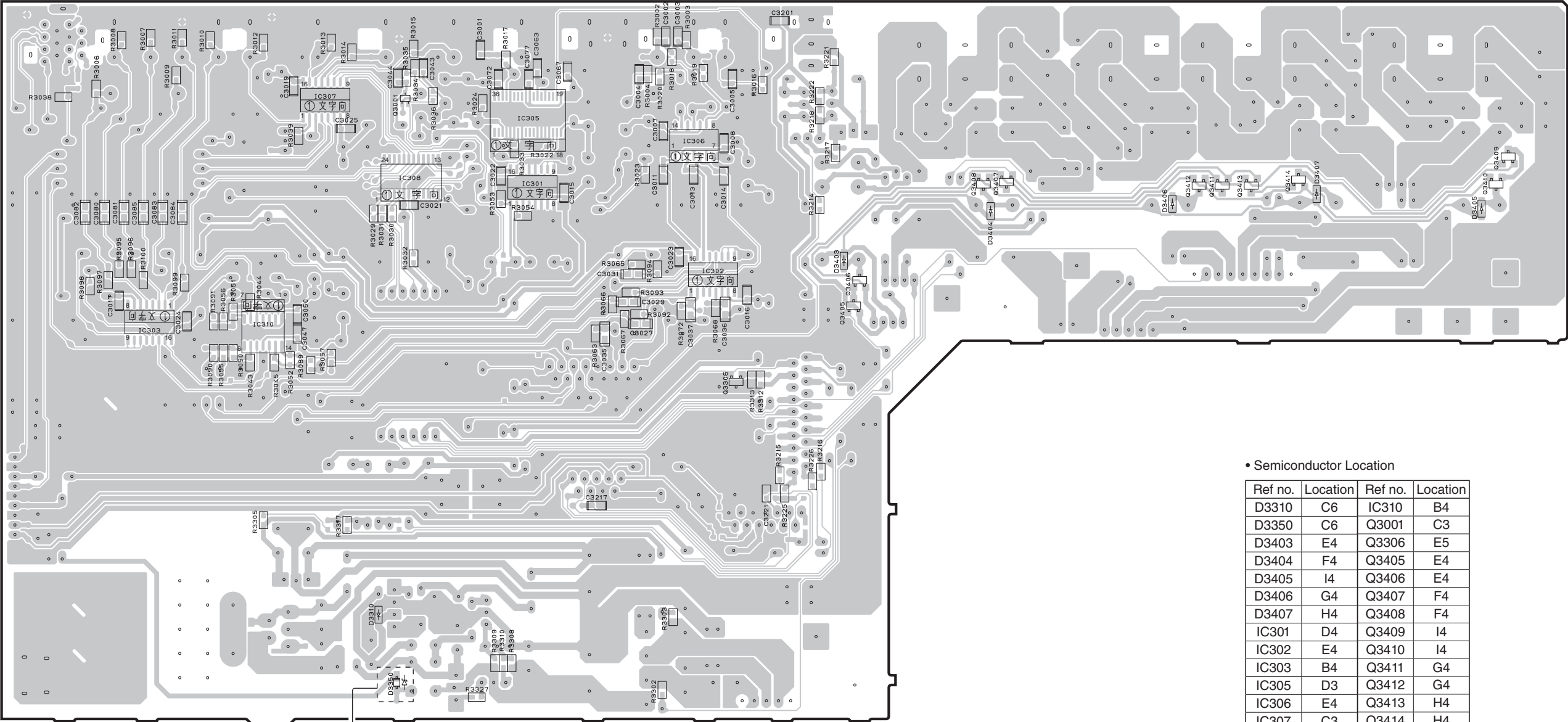
## SPEAKERS





RX-V671/HTR-6064

VIDEO (1) (Side B)

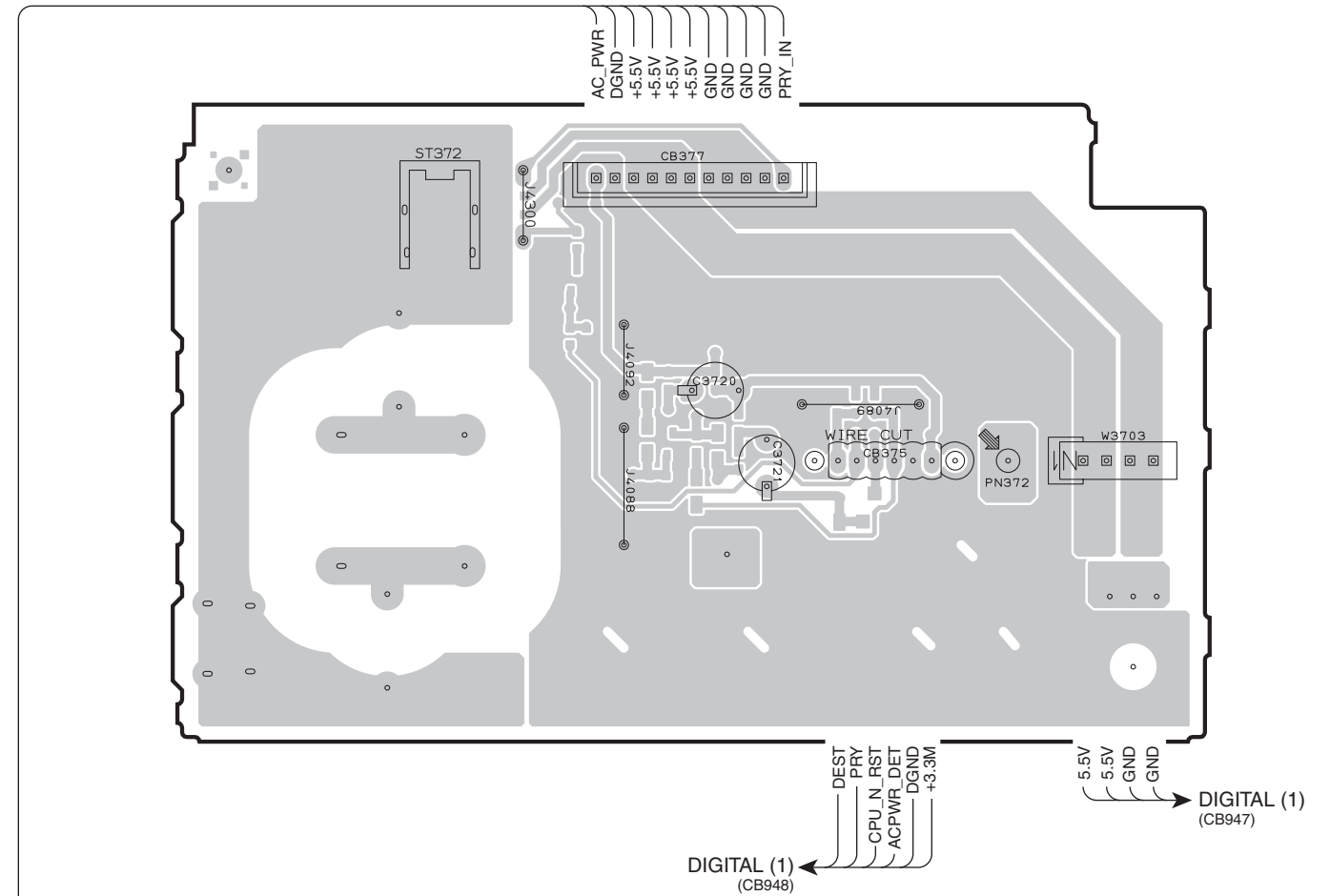


R, S models

• Semiconductor Location

Ref no.	Location	Ref no.	Location
D3310	C6	IC310	B4
D3350	C6	Q3001	C3
D3403	E4	Q3306	E5
D3404	F4	Q3405	E4
D3405	I4	Q3406	E4
D3406	G4	Q3407	F4
D3407	H4	Q3408	F4
IC301	D4	Q3409	I4
IC302	E4	Q3410	I4
IC303	B4	Q3411	G4
IC305	D3	Q3412	G4
IC306	E4	Q3413	H4
IC307	C3	Q3414	H4
IC308	C4		

**VIDEO (3)** (Side A)



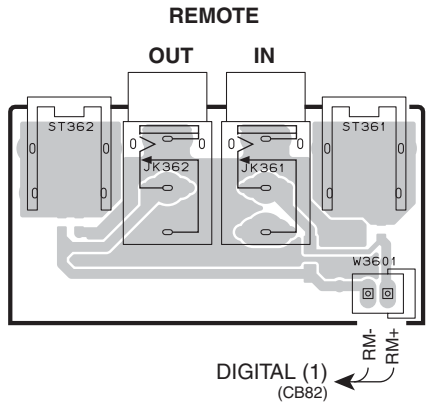
- Some internal parts in this product contain high voltages and are dangerous. Be sure to take safety measures during servicing, such as wearing insulating gloves.
  - Note that the capacitors indicated below are dangerous even after the power is turned off because an electric charge remains and a high voltage continues to exist there. Before starting any repair work, connect a discharging resistor (5 k-ohms/10 W) to the terminals of each capacitor indicated below to discharge electricity. The time required for discharging is about 30 seconds per each.
- C3706 on VIDEO (2) P.C.B.

- Semiconductor Location

Ref no.	Location
D3701	D3
D3704	C4
IC371	E4
IC372	D5
IC373	D5
IC374	B4

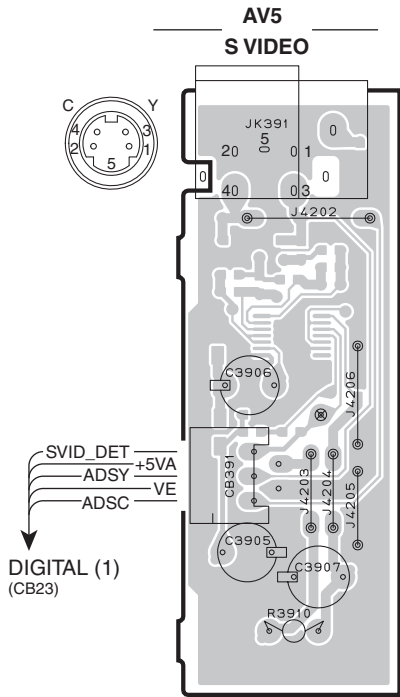


VIDEO (4) (Side A)



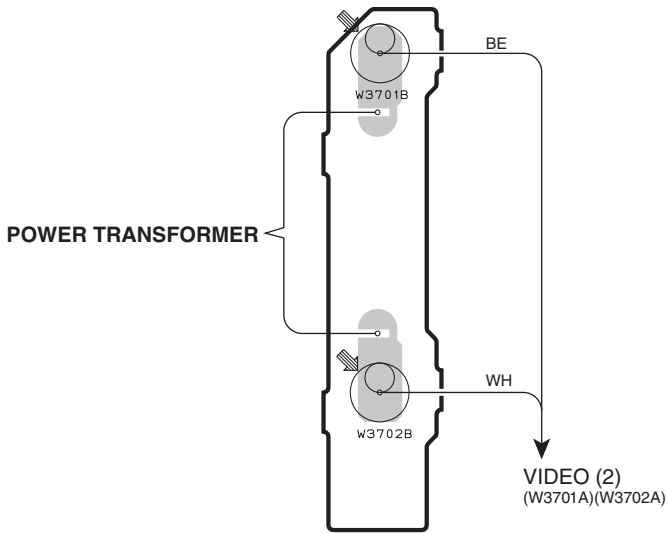
VIDEO (5) (Side A)

B, G, F models

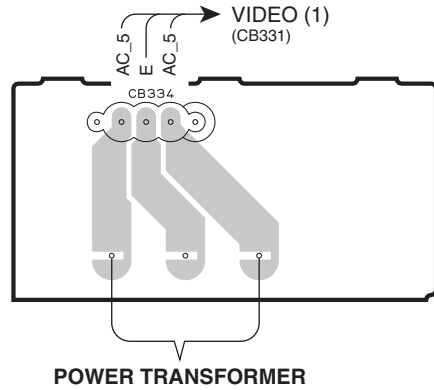


VIDEO (6) (Side A)

U, C, T, A, B, G, F, L models

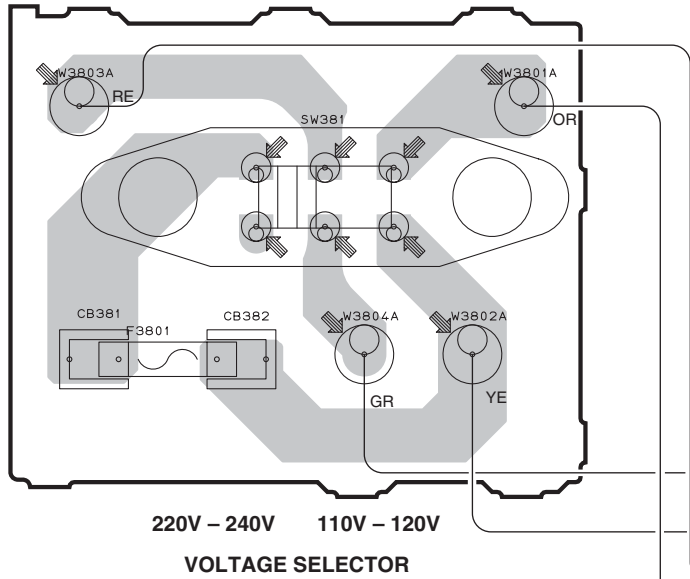


VIDEO (7) (Side A)



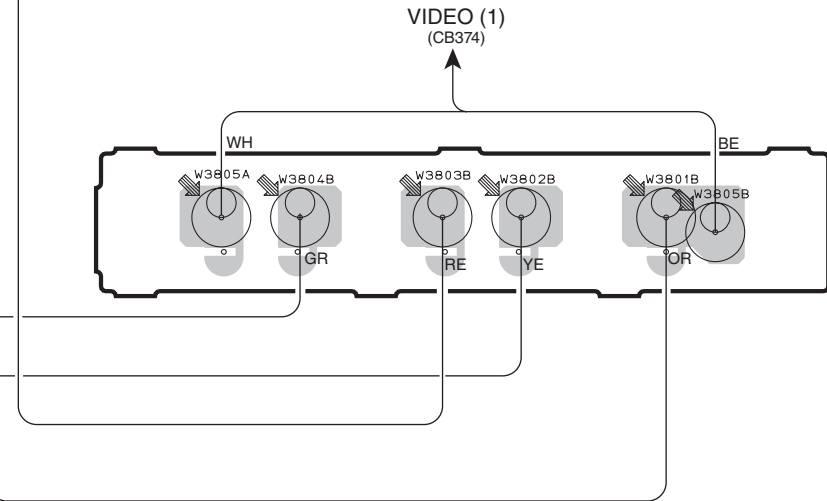
VIDEO (8) (Side A)

R, S models



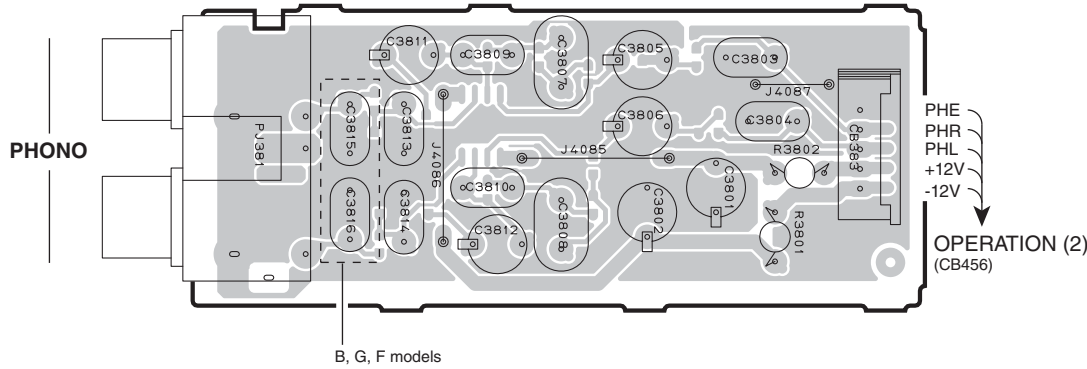
VIDEO (9) (Side A)

R, S models



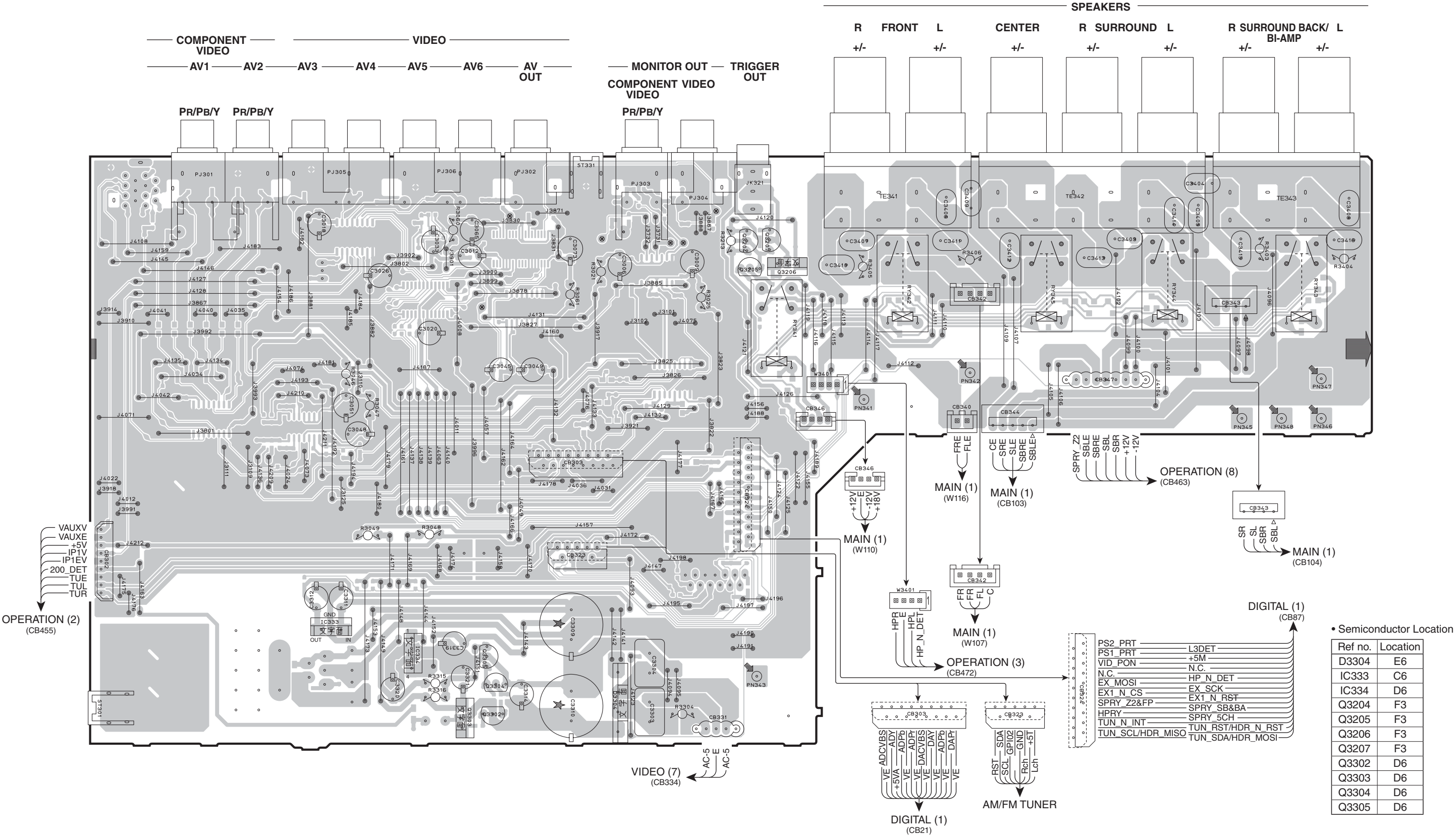
VIDEO (10) (Side A)

R, T, A, B, G, F, L, S models





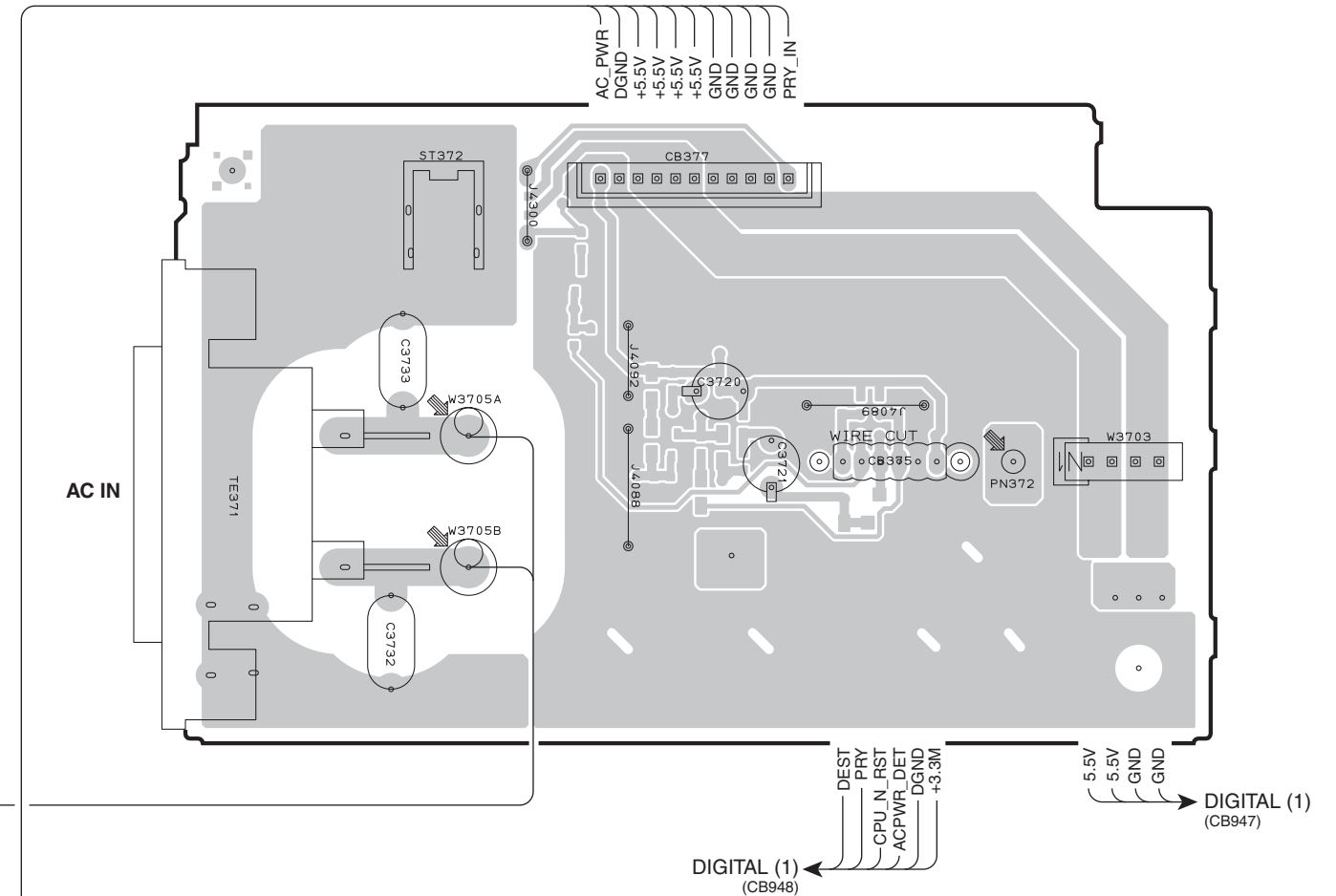
VIDEO (1) (Side A)







**VIDEO (3)** (Side A)



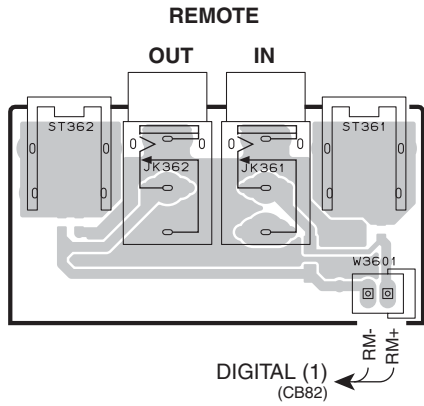
Ref no.	Location
D3701	D3
D3704	C4
IC371	E4
IC372	D5
IC373	D5
IC374	B4



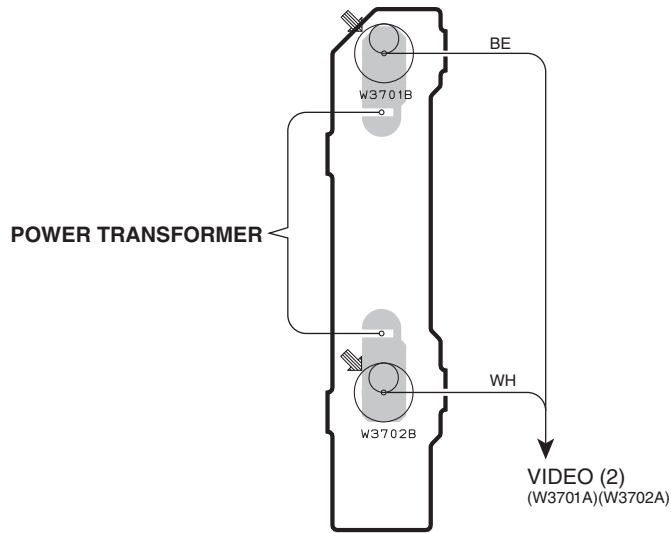


RX-A710

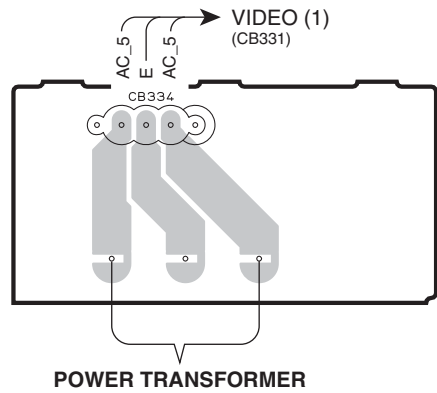
VIDEO (4) (Side A)



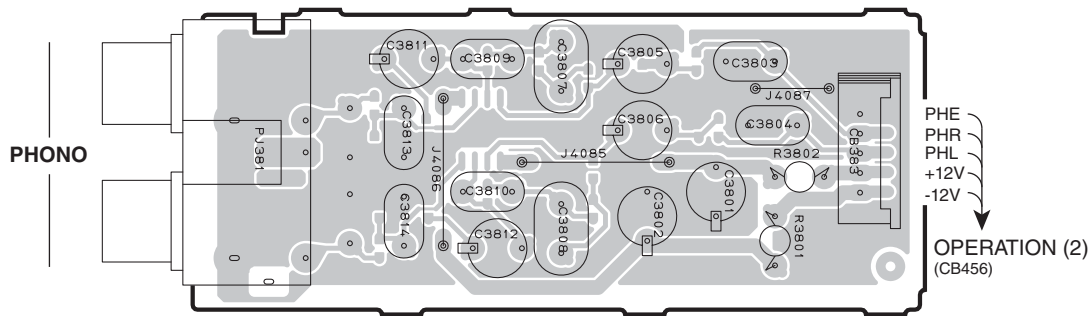
VIDEO (6) (Side A)  
U, C models



VIDEO (7) (Side A)



VIDEO (10) (Side A)  
A model



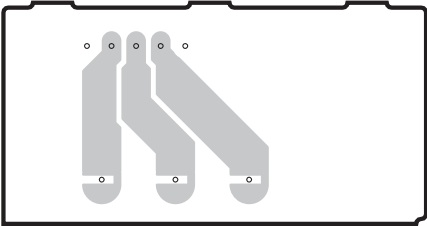
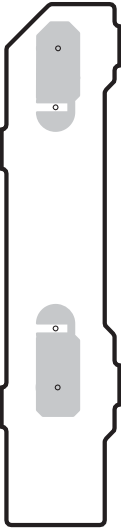
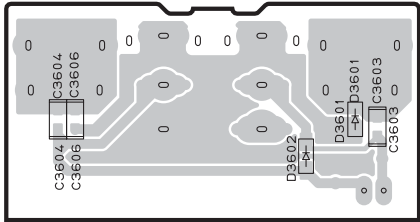
RX-A710

VIDEO (4) (Side B)

VIDEO (6) (Side B)

VIDEO (7) (Side B)

U, C models

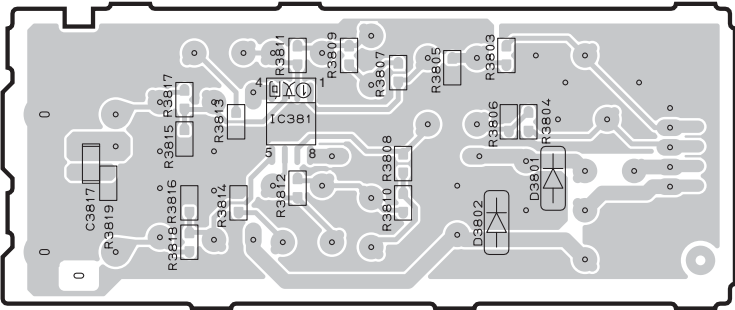


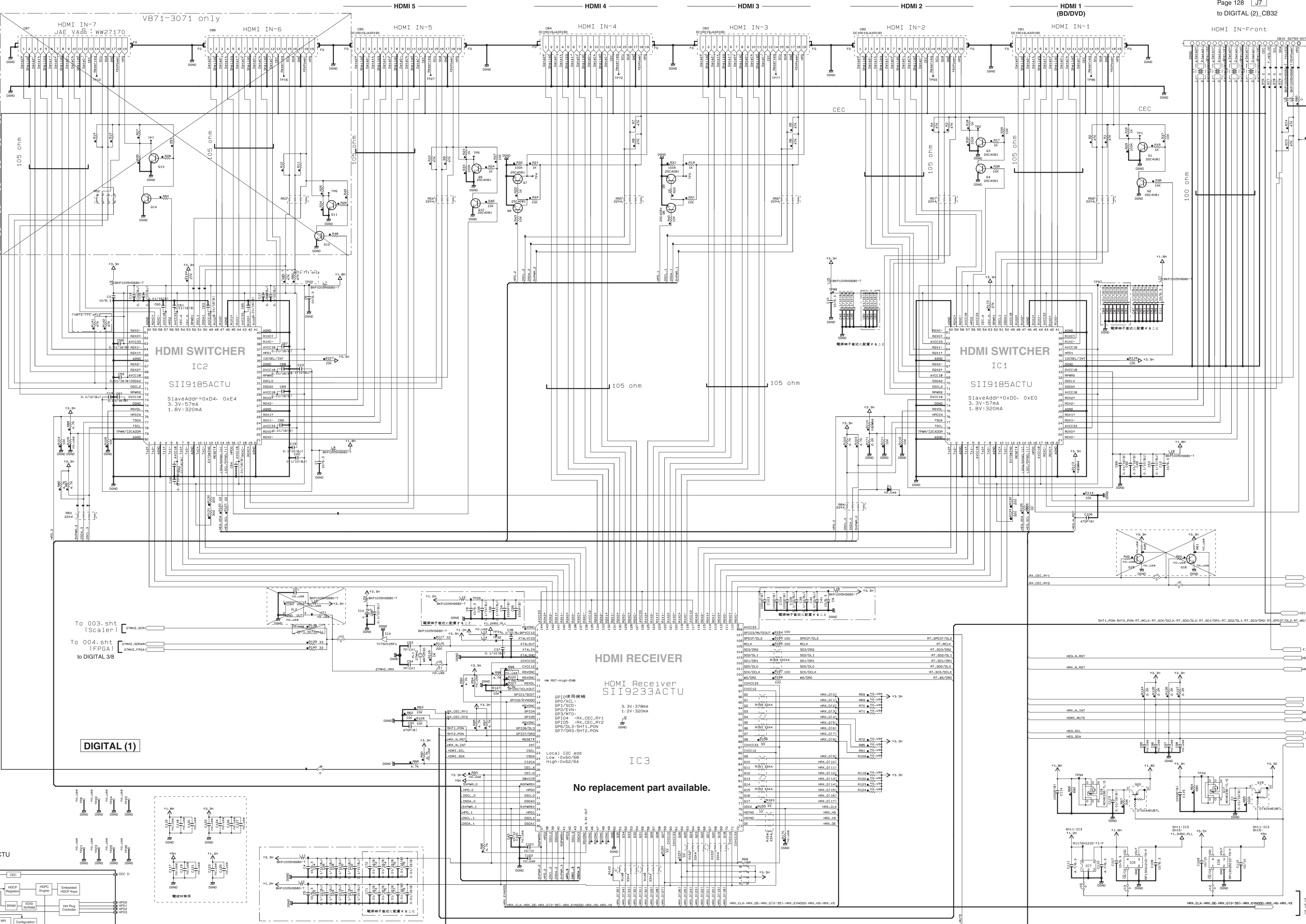
VIDEO (10) (Side B)

A model

• Semiconductor Location

Ref no.	Location
D3601	B3
D3602	B3
D3801	I6
D3802	I6
IC381	H6

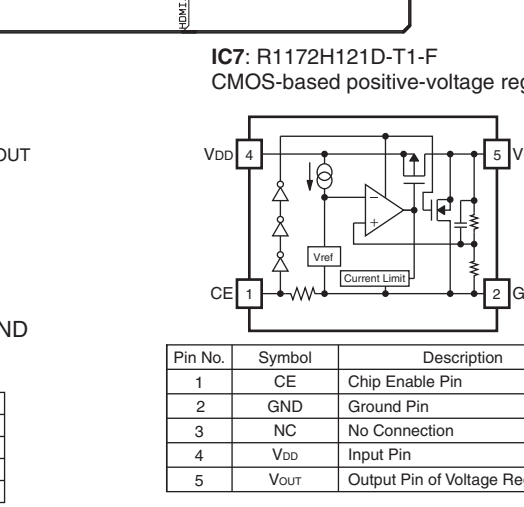
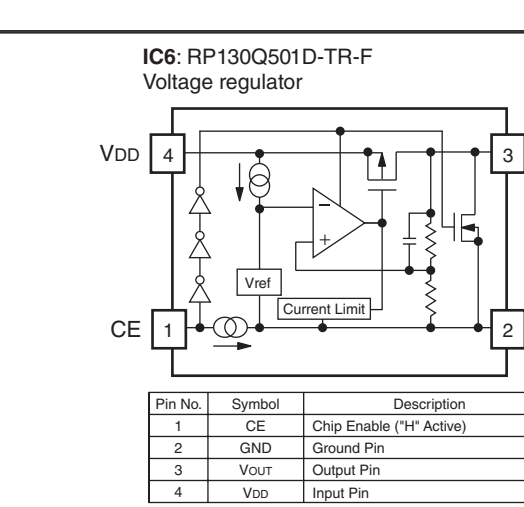
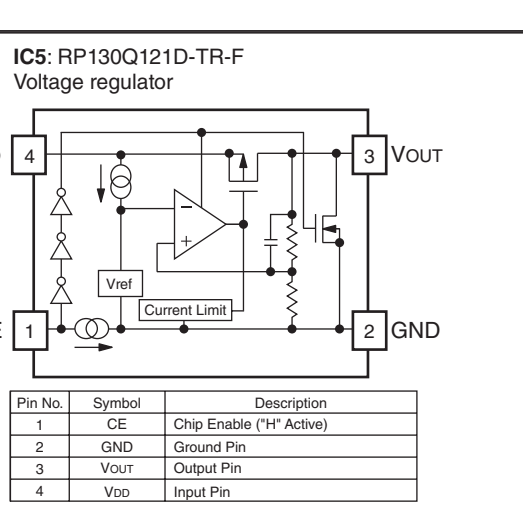
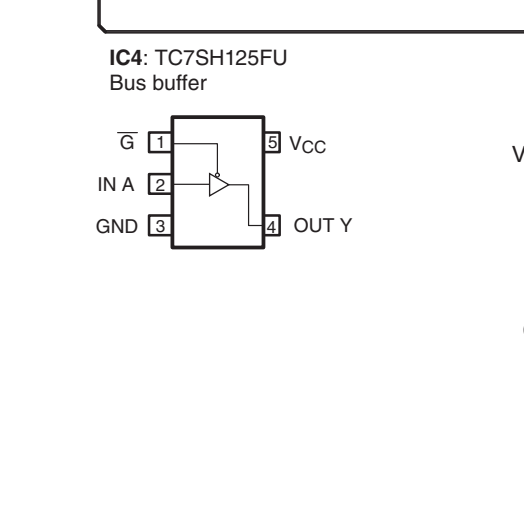
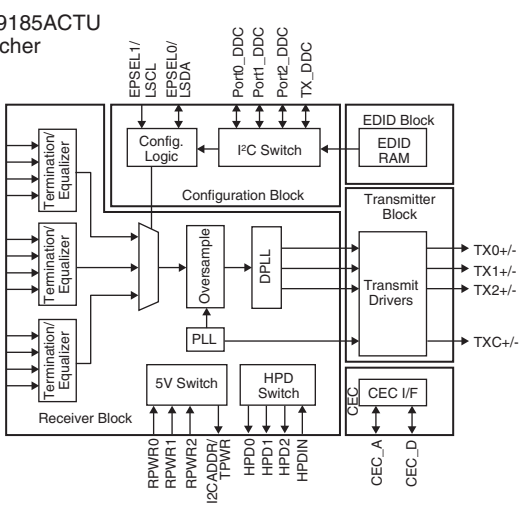
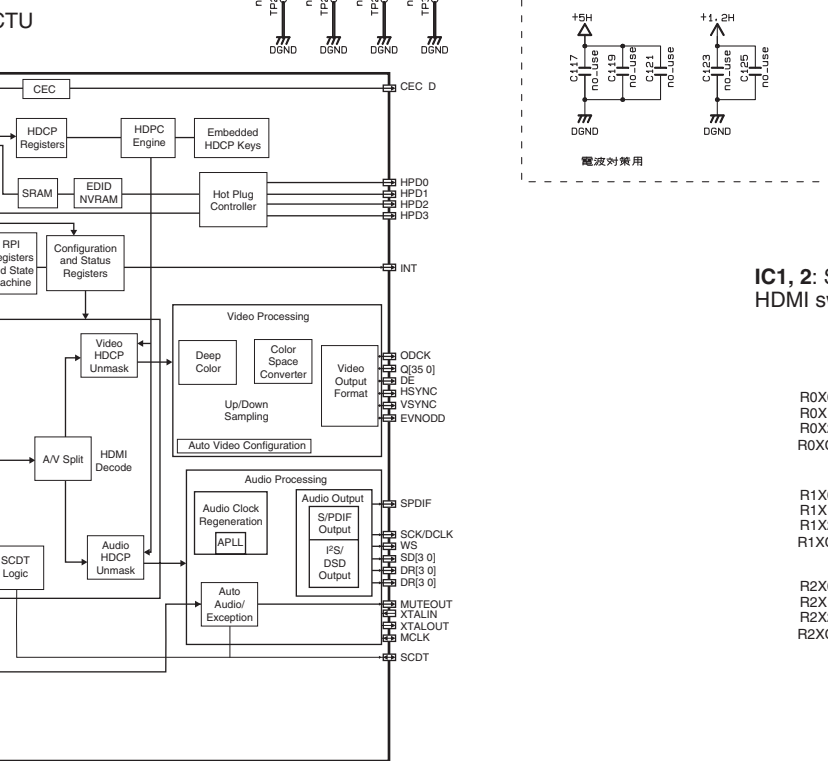




REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
Δ	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
■	METAL PLATE RESISTOR
■	FIRE PROOF CARBON FILM RESISTOR
■	CEMENT MOLDED RESISTOR
■	SEMI-VARIABLE RESISTOR
■	CHIP RESISTOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
⊗	CERAMIC CAPACITOR
⊗	CERAMIC TUBULAR CAPACITOR
⊗	POLYESTER FILM CAPACITOR
⊗	POLYSTYRENE FILM CAPACITOR
⊗	MYLA CAPACITOR
⊗	POLYPROPYLENE FILM CAPACITOR
⊗	SEMICONDUCTIVE CERAMIC CAPACITOR

NOTICE (Inode1)  
(J)..... JAPAN  
(U)..... U.S.A  
(C)..... CANADA  
(R)..... GENERAL  
(T)..... CHINA  
(K)..... KOREA  
(A)..... AUSTRALIA  
(B)..... BRITISH  
(G)..... EUROPE  
(L)..... SINGAPORE  
(E)..... SOUTH EUROPE  
(V)..... TAIWAN  
(F)..... RUSSIAN  
(P)..... LATIN AMERICA  
(S)..... BRAZIL  
(H)..... THAI



Sheet 1: HDMI Rx  
IC/CB/XL 1-300  
OTHER 1-300

\* All voltages are measured with a 10MΩ/V DC electronic voltmeter.  
\* Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.  
\* Schematic diagram is subject to change without notice.

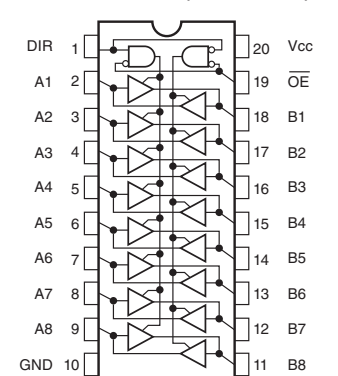


## DIGITAL (1)

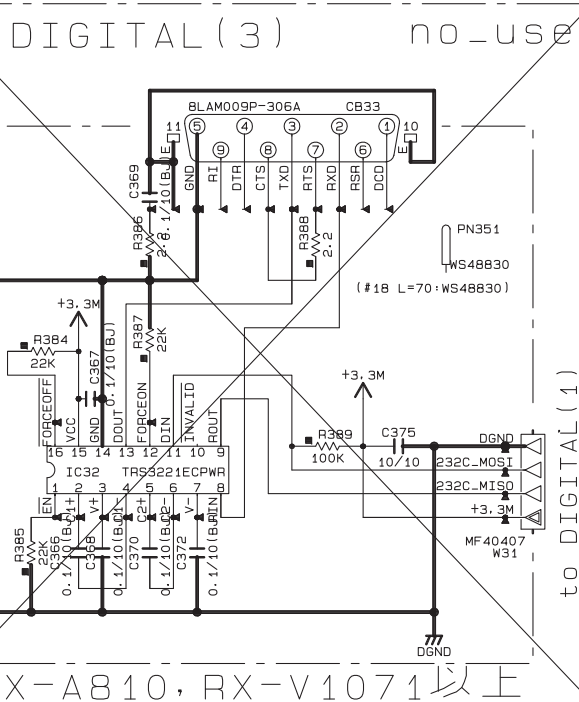


RESISTOR	
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
<input checked="" type="checkbox"/>	CARBON FILM RESISTOR (P=10)
<input type="checkbox"/>	METAL OXIDE FILM RESISTOR
<input type="checkbox"/>	METAL FILM RESISTOR
<input type="checkbox"/>	METAL PLATE RESISTOR
<input checked="" type="checkbox"/>	FIRE PROOF CARBON FILM RESISTOR
<input type="checkbox"/>	CEMENT MOLDED RESISTOR
<input checked="" type="checkbox"/>	SEMI VARIABLE RESISTOR
<input type="checkbox"/>	CHIP RESISTOR

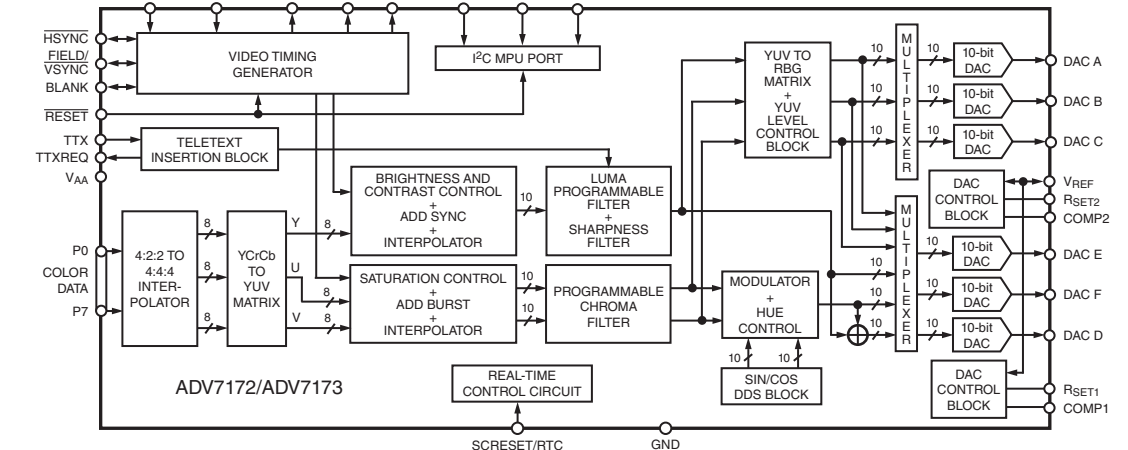
**IC23-25: TC74LCX245FT**  
Low voltage octal bus transceiver  
with 5-V tolerant inputs and outputs



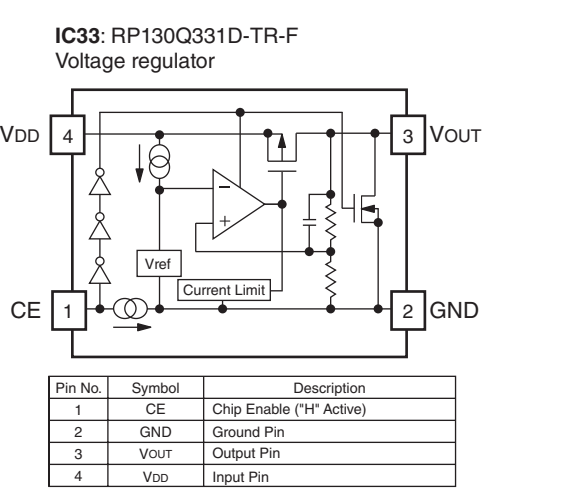
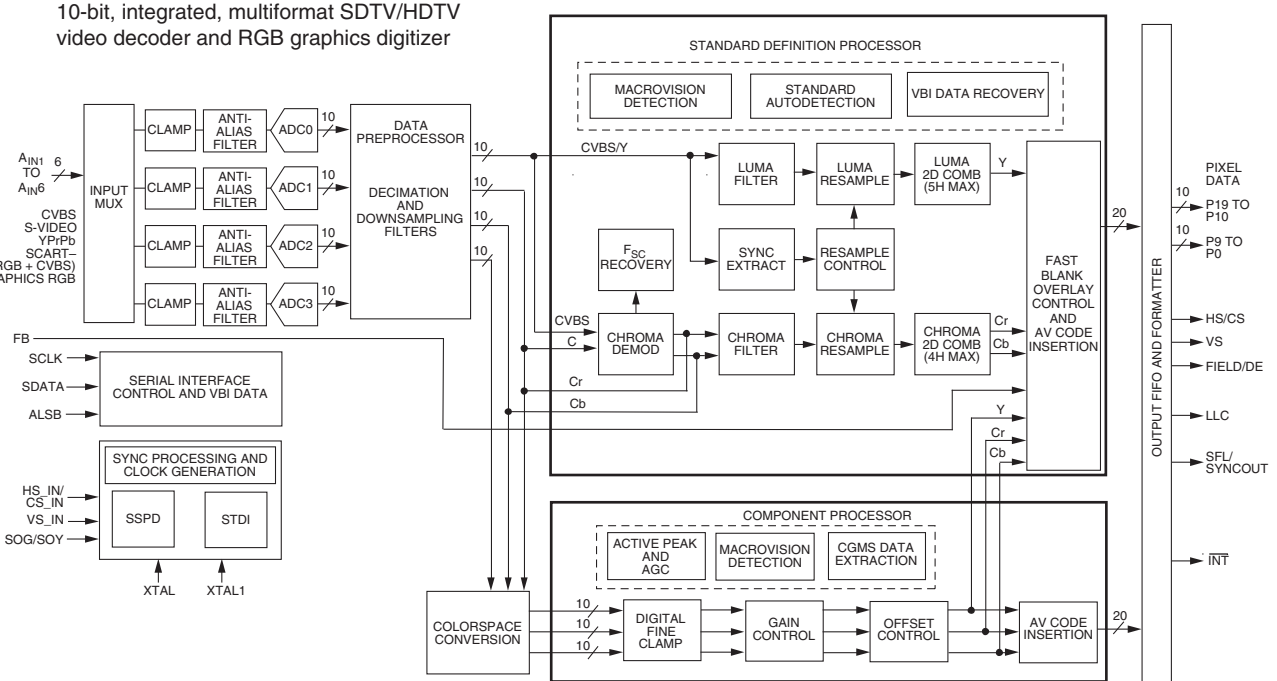
**No replacement part available.**

Page 127 L1  
to DIGITAL (1)\_CB10

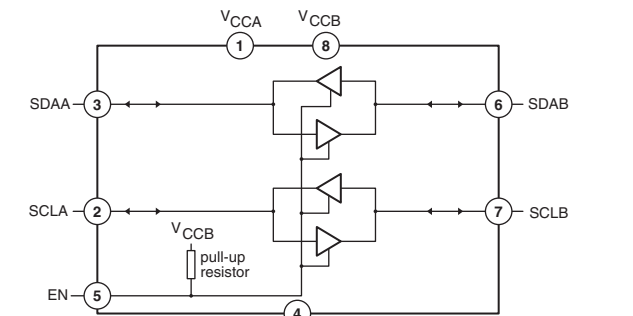
: 30-39  
: 351-399  
: 351-399



**IC21: ADV7181CBSTZ**  
10-bit, integrated, multiformat SDTV/HDTV  
video decoder and RGB graphics digitizer



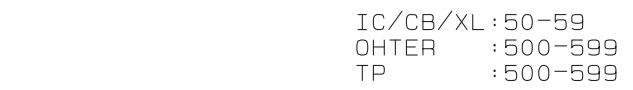
**IC34:** PCA9517DP  
Level translating I<sup>2</sup>C-bus repeater



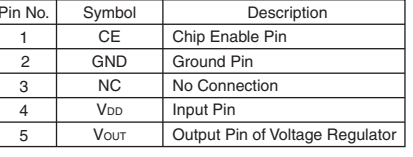
**IC22:** ADV7172KSTZ  
Digital PAL/NTSC video encoder

- ★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
- ★ Components having special characteristics are marked  $\Delta$  and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.





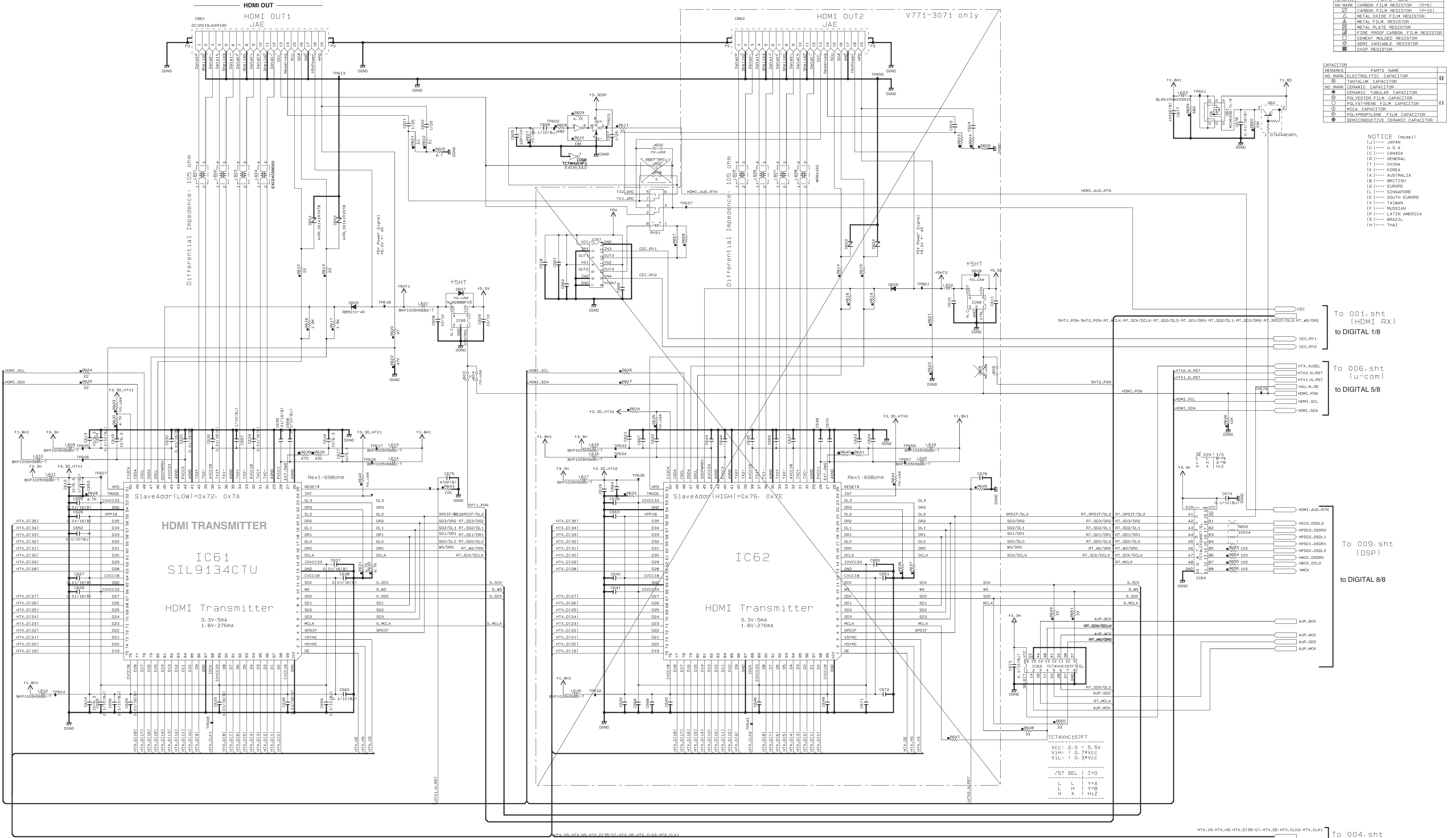
CAPACITOR		
REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	N
⊗	TANTALUM CAPACITOR	
NO MARK	CERAMIC CAPACITOR	H
⊙	CERAMIC TUBULAR CAPACITOR	
⊗	POLYESTER FILM CAPACITOR	
○	POLYSTYRENE FILM CAPACITOR	
①	MICA CAPACITOR	
②	POLYPROPYLENE FILM CAPACITOR	
⊙	SEMICONDUCTIVE CERAMIC CAPACITOR	



- ★ All voltages are measured with a 10M $\Omega$ /V DC electronic voltmeter.
- ★ Components having special characteristics are marked  $\Delta$  and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.



DIGITAL 4/8

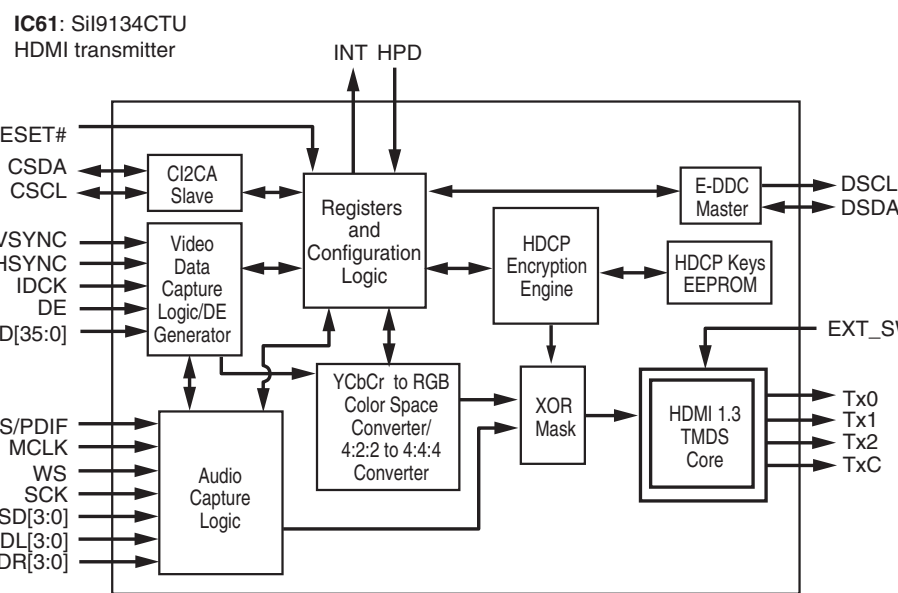


REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
Δ	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
⊠	METAL FILM RESISTOR
⊞	METAL PLATE RESISTOR
⊞	FIRE-PROOF CARBON FILM RESISTOR
⊞	CEMENT-MOUNTED RESISTOR
⊞	SEMI-VARIABLE RESISTOR
⊞	CHIP RESISTOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
⊞	TANTALUM CAPACITOR
⊞	CERAMIC CAPACITOR
⊞	CERAMIC TUBULAR CAPACITOR
⊞	POLYESTER FILM CAPACITOR
⊞	POLYSTYRENE FILM CAPACITOR
⊞	MICA CAPACITOR
⊞	POLYPROPYLENE FILM CAPACITOR
⊞	SEMICONDUCTIVE CERAMIC CAPACITOR

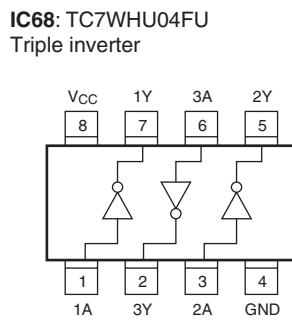
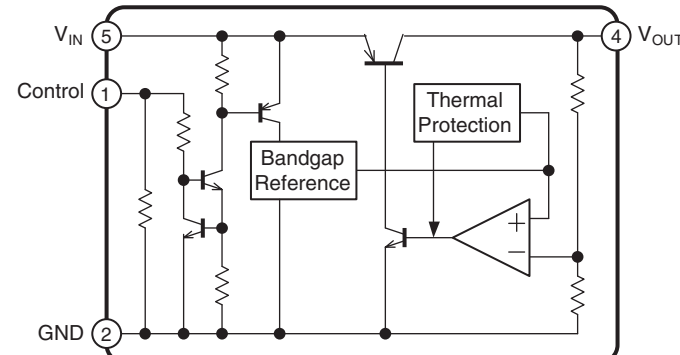
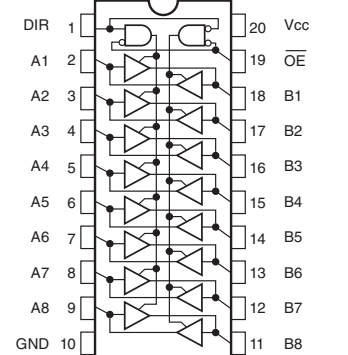
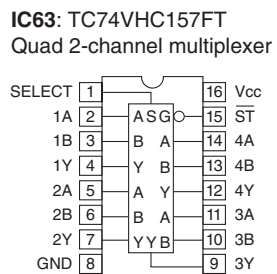
NOTICE (mode1)  
(J)..... JAPAN  
(U)..... U.S.A.  
(C)..... CANADA  
(R)..... GENERAL  
(T)..... CHINA  
(K)..... KOREA  
(A)..... AUSTRALIA  
(B)..... BRITISH  
(G)..... EUROPE  
(L)..... SINGAPORE  
(E)..... SOUTH EUROPE  
(V)..... TAIWAN  
(F)..... RUSSIAN  
(P)..... LATIN AMERICA  
(S)..... BRAZIL  
(H)..... THAI

★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.  
★ Components having special characteristics are marked Δ, and must be replaced with parts having specifications equal to those originally installed.  
★ Schematic diagram is subject to change without notice.



IC64: TC74LCX245FT  
Low voltage octal bus transceiver  
with 5-V tolerant inputs and outputs

IC65: NJM2888F05  
Low dropout voltage regulator



IC/CB/XL: 60-79  
OHTER : 600-799  
TP : 600-799

Sheet5:HDMI Tx

DIGITAL (1)

To 004.sht (FPGA)  
to DIGITAL 3/8



## NOTICE (model)

(J) ..... JAPAN  
(U) ..... U.S.A.  
(C) ..... CANADA  
(R) ..... GENERAL  
(T) ..... CHINA  
(K) ..... KOREA  
(A) ..... AUSTRALIA  
(B) ..... BRITISH  
(G) ..... EUROPE  
(L) ..... SINGAPORE  
(V) ..... SOUTH EUROPE  
(F) ..... RUSSIAN  
(S) ..... LATIN AMERICA  
(H) ..... BRAZIL  
(H) ..... THAI

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=10)
Δ	METAL OXIDE FILM RESISTOR
□	METAL FILM RESISTOR
▢	METAL PLATE RESISTOR
▤	FINE PROF. CARBON FILM RESISTOR
▥	CEMENT MOLDED RESISTOR
▧	SEMI VARIABLE RESISTOR
▨	CHIP RESISTOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
NO MARK	CERAMIC CAPACITOR
○	CERAMIC TUBULAR CAPACITOR
⊙	POLYESTER FILM CAPACITOR
⊖	POLYSTYRENE FILM CAPACITOR
⊕	MICA CAPACITOR
⊗	POLYPROPYLENE FILM CAPACITOR
⊘	SEMICONDUCTIVE CERAMIC CAPACITOR

RESISTOR

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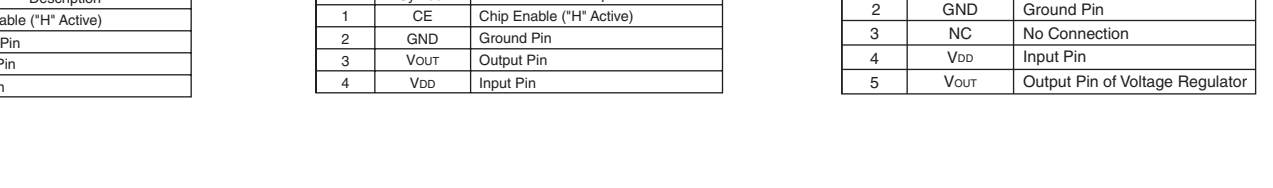
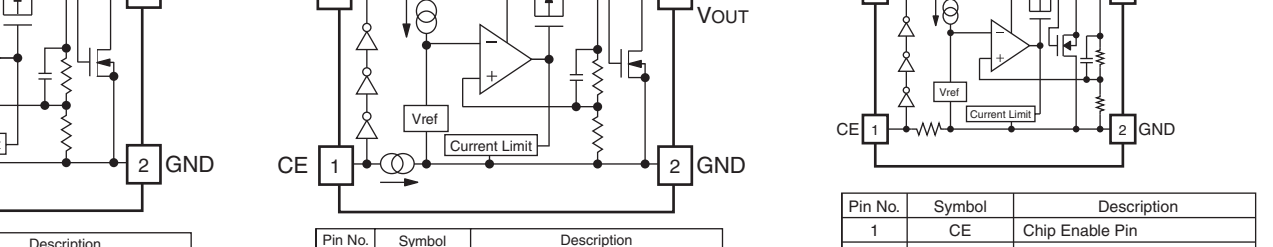
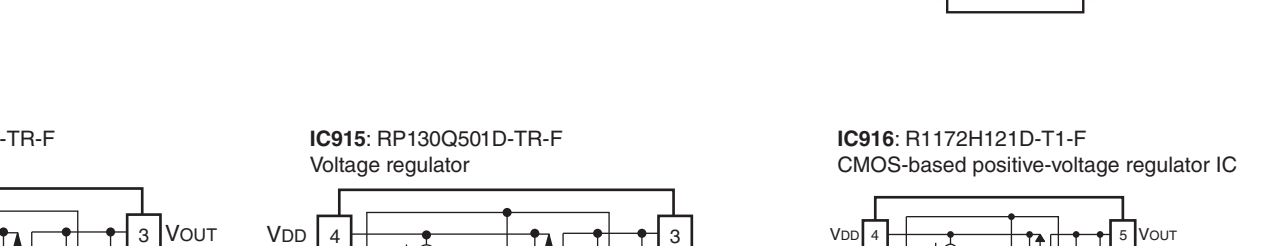
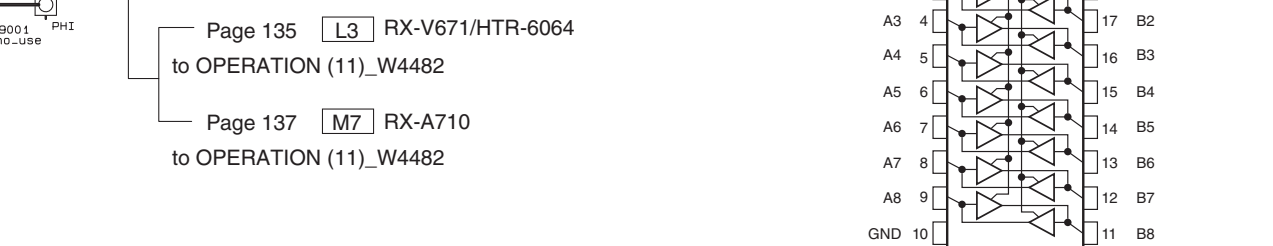
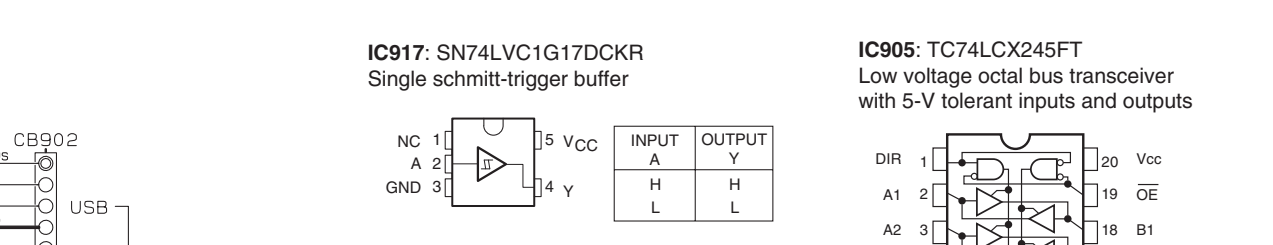
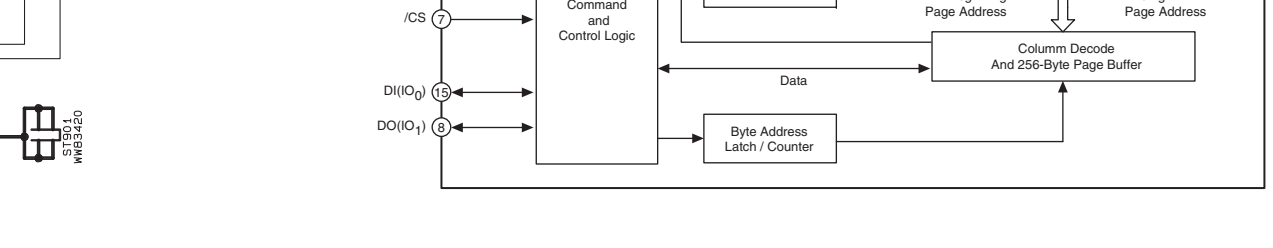
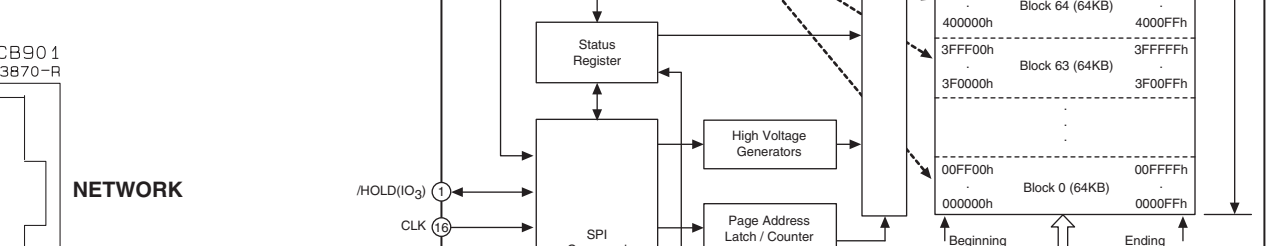
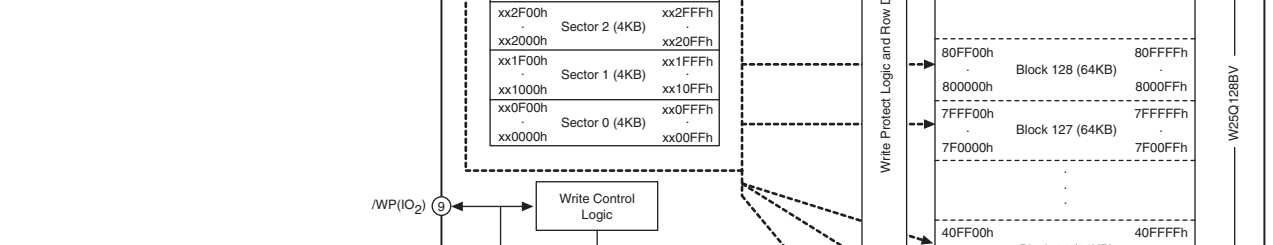
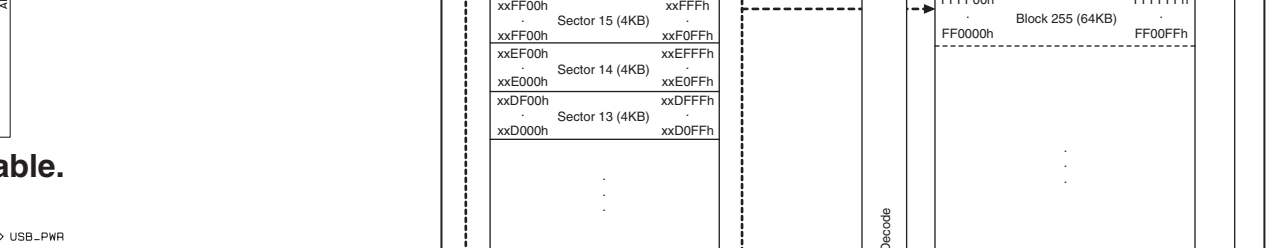
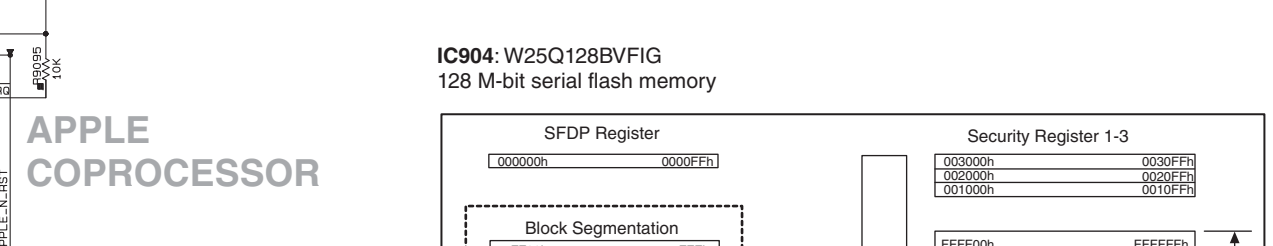
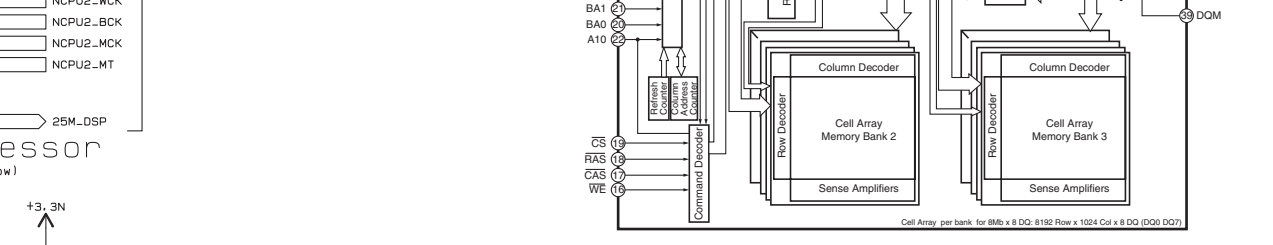
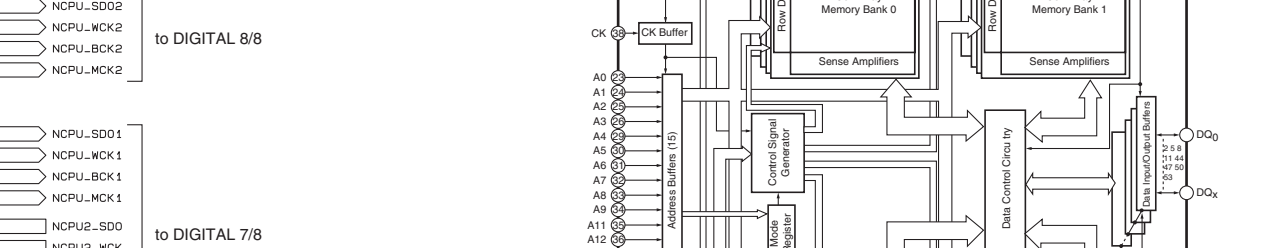
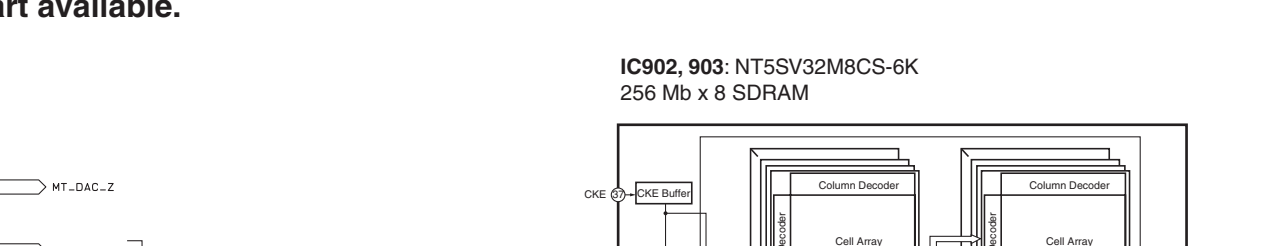
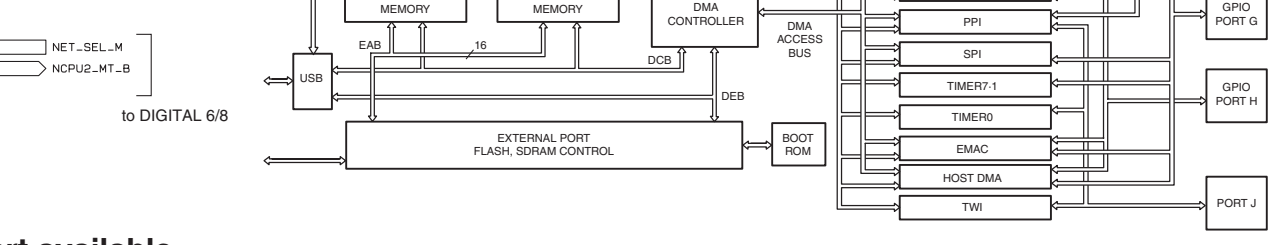
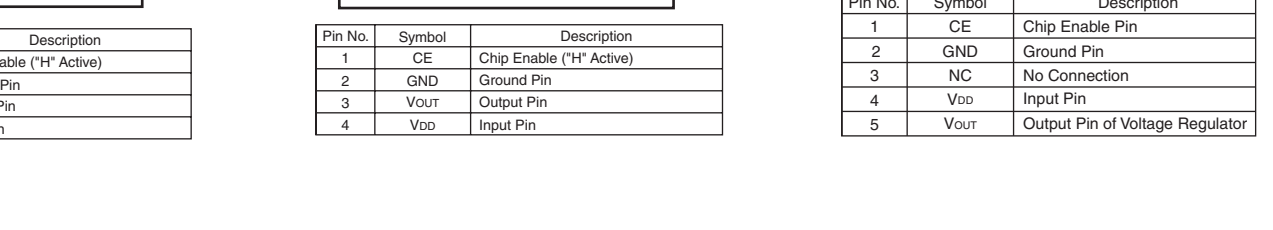
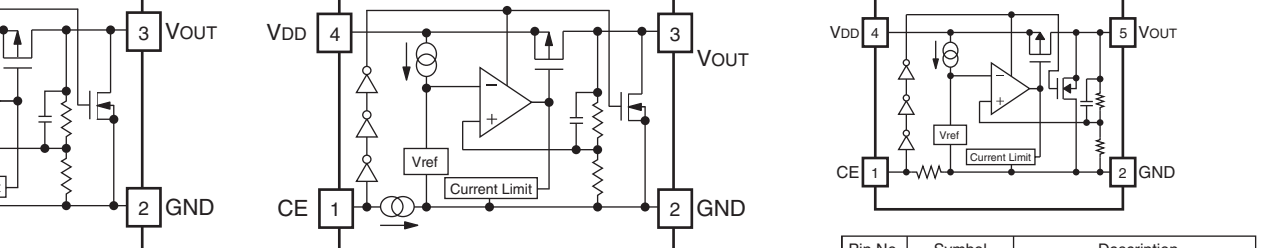
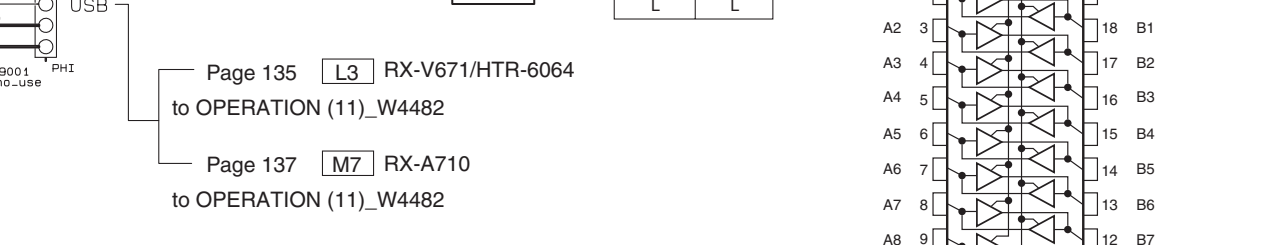
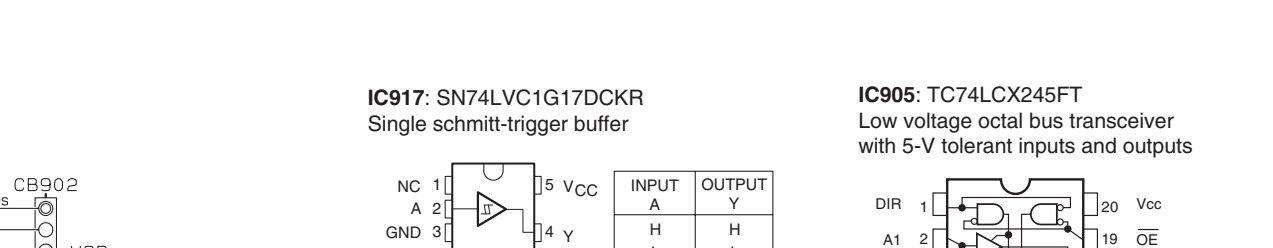
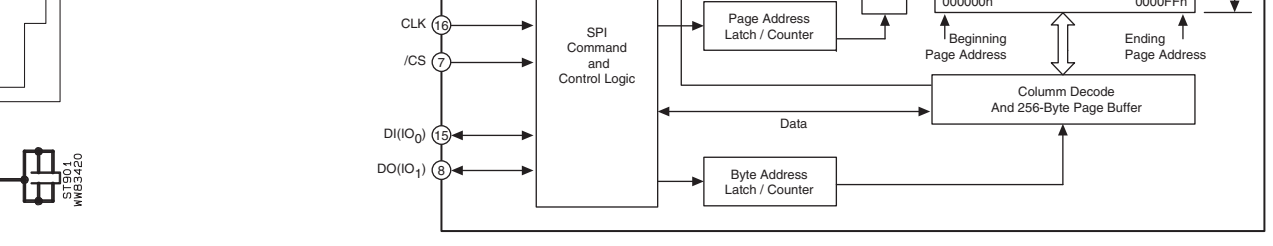
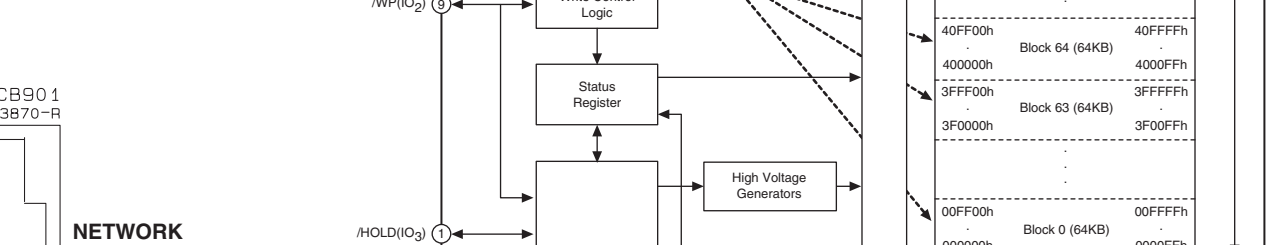
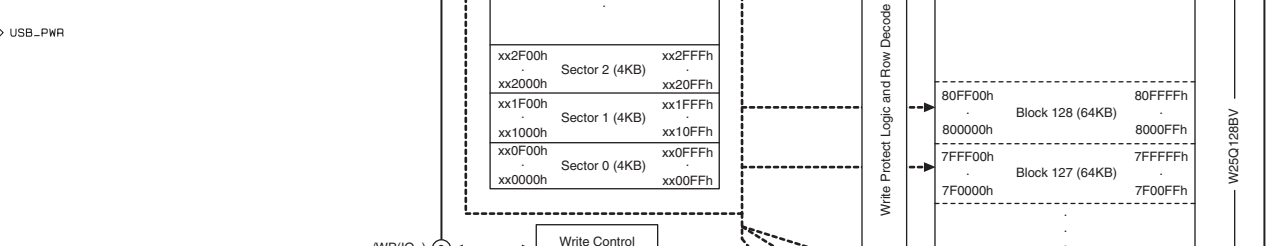
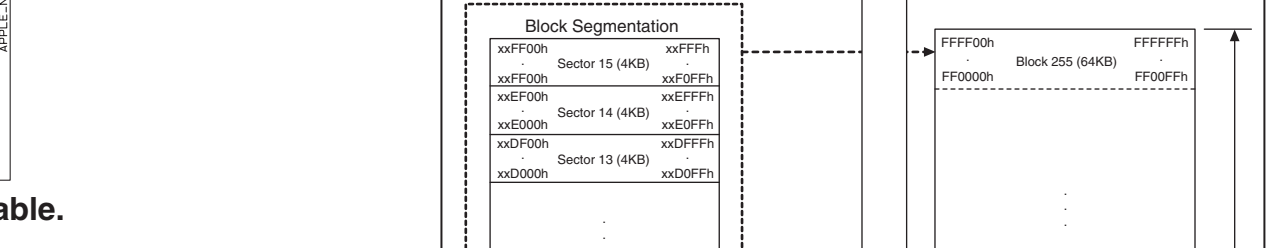
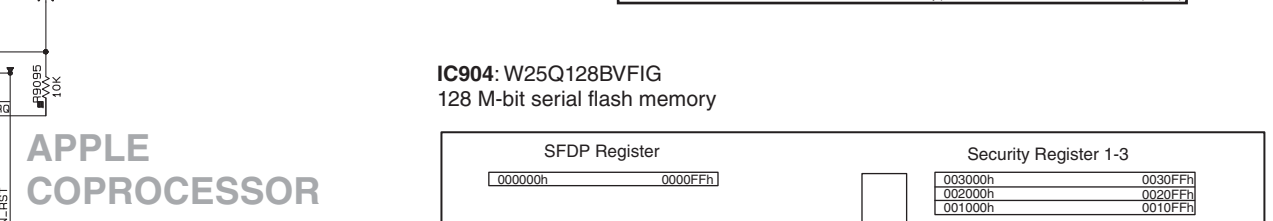
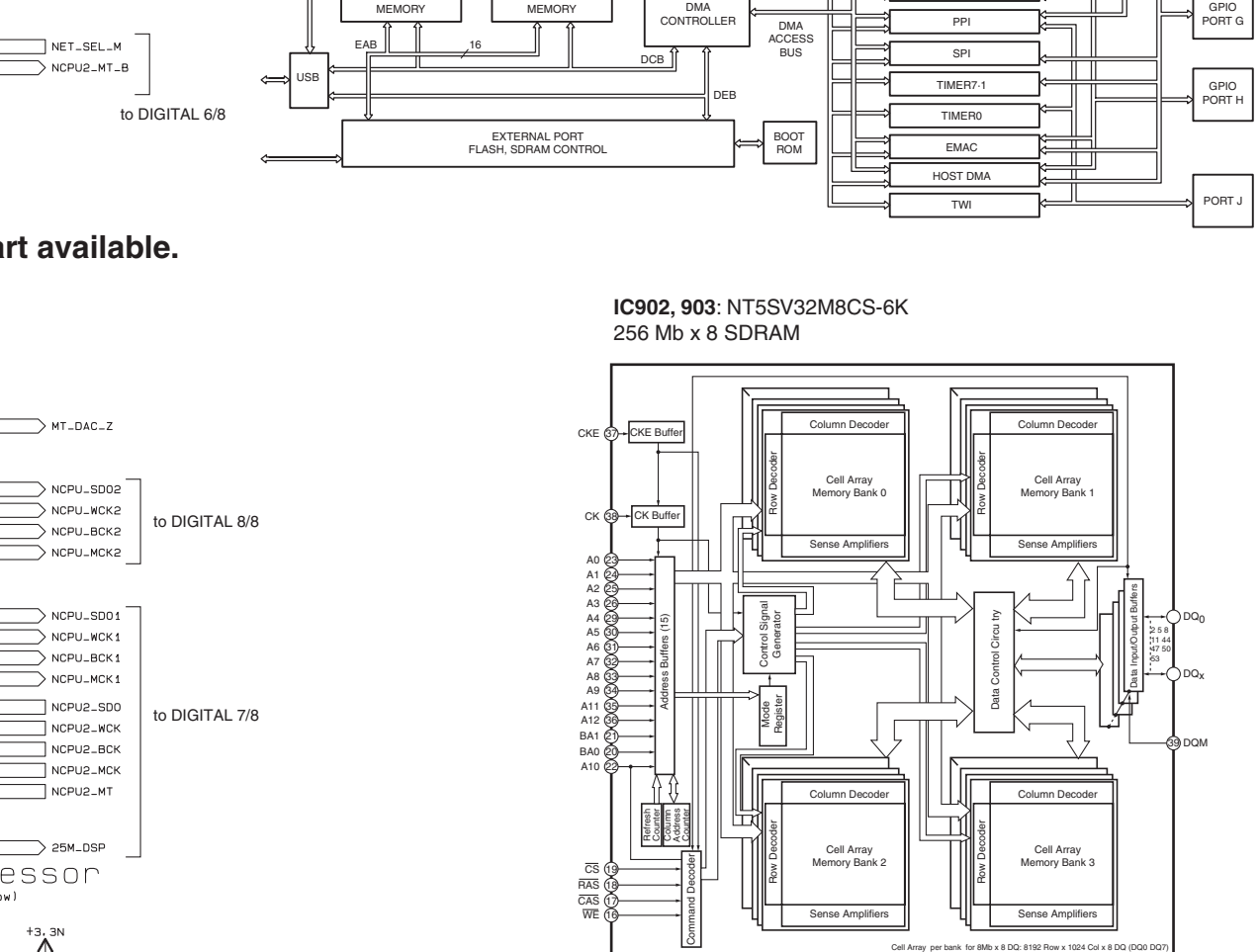
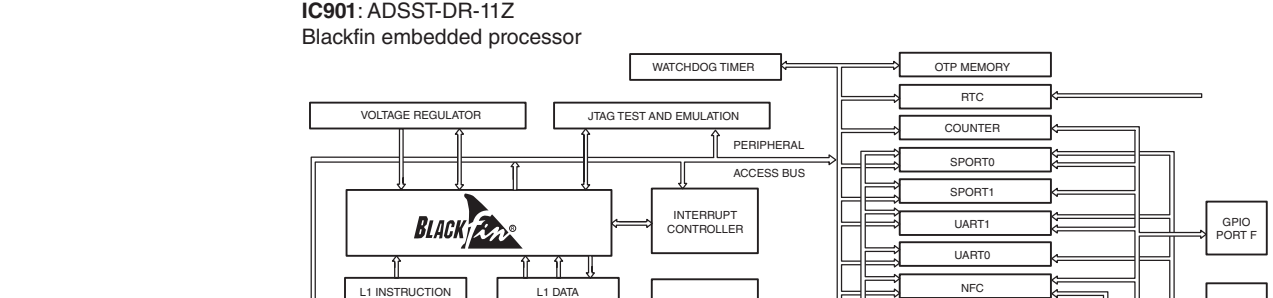
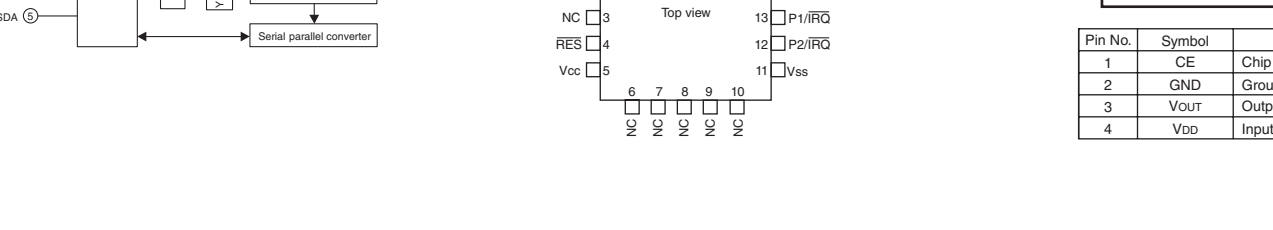
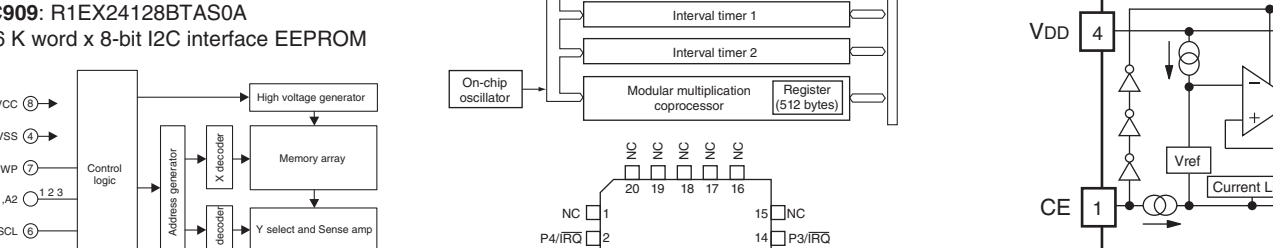
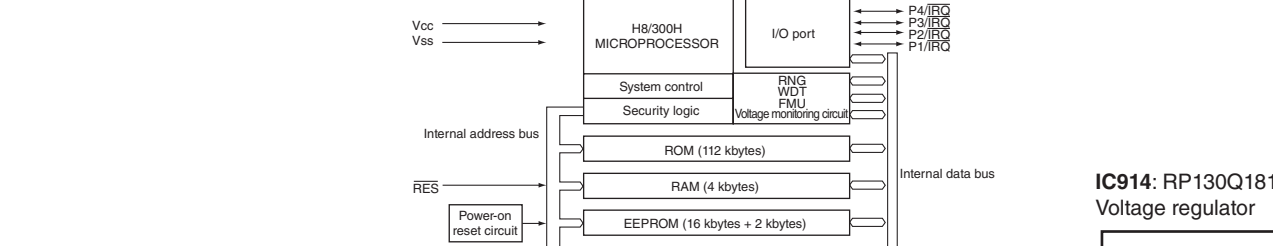
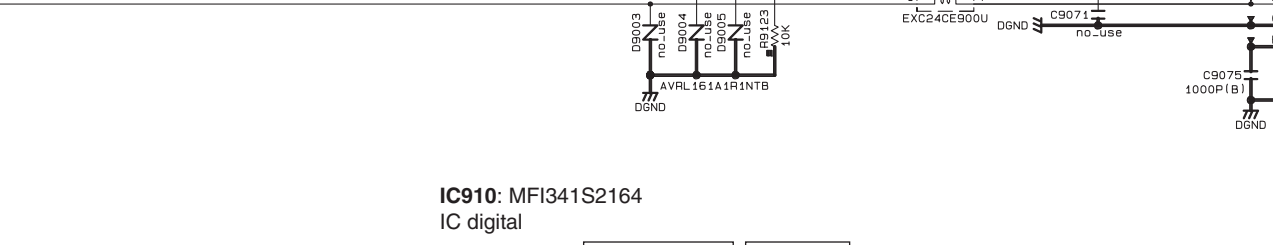
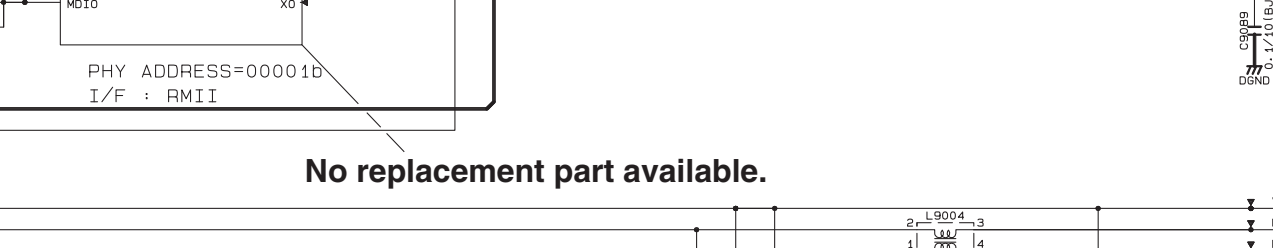
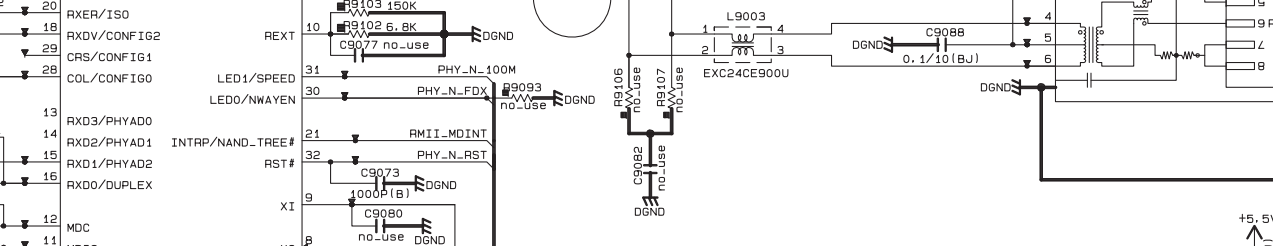
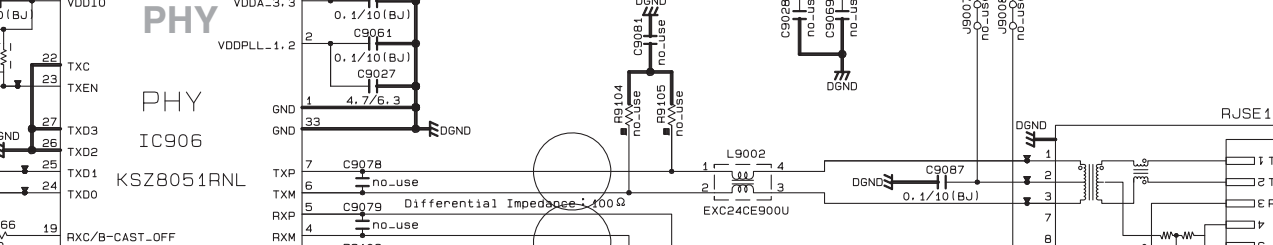
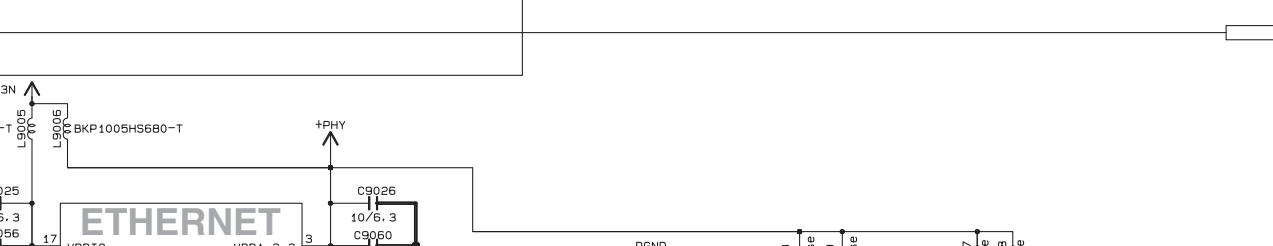
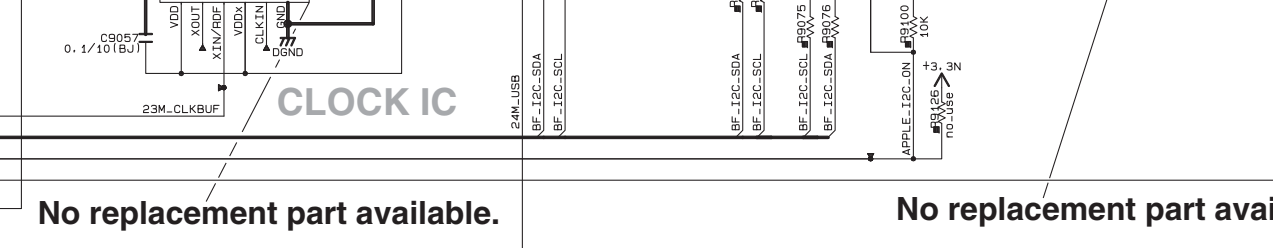
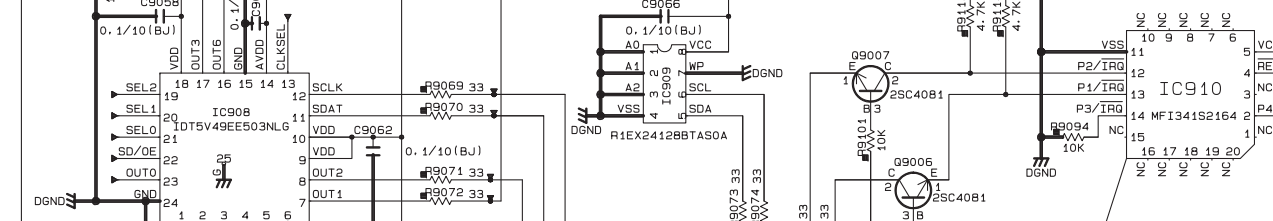
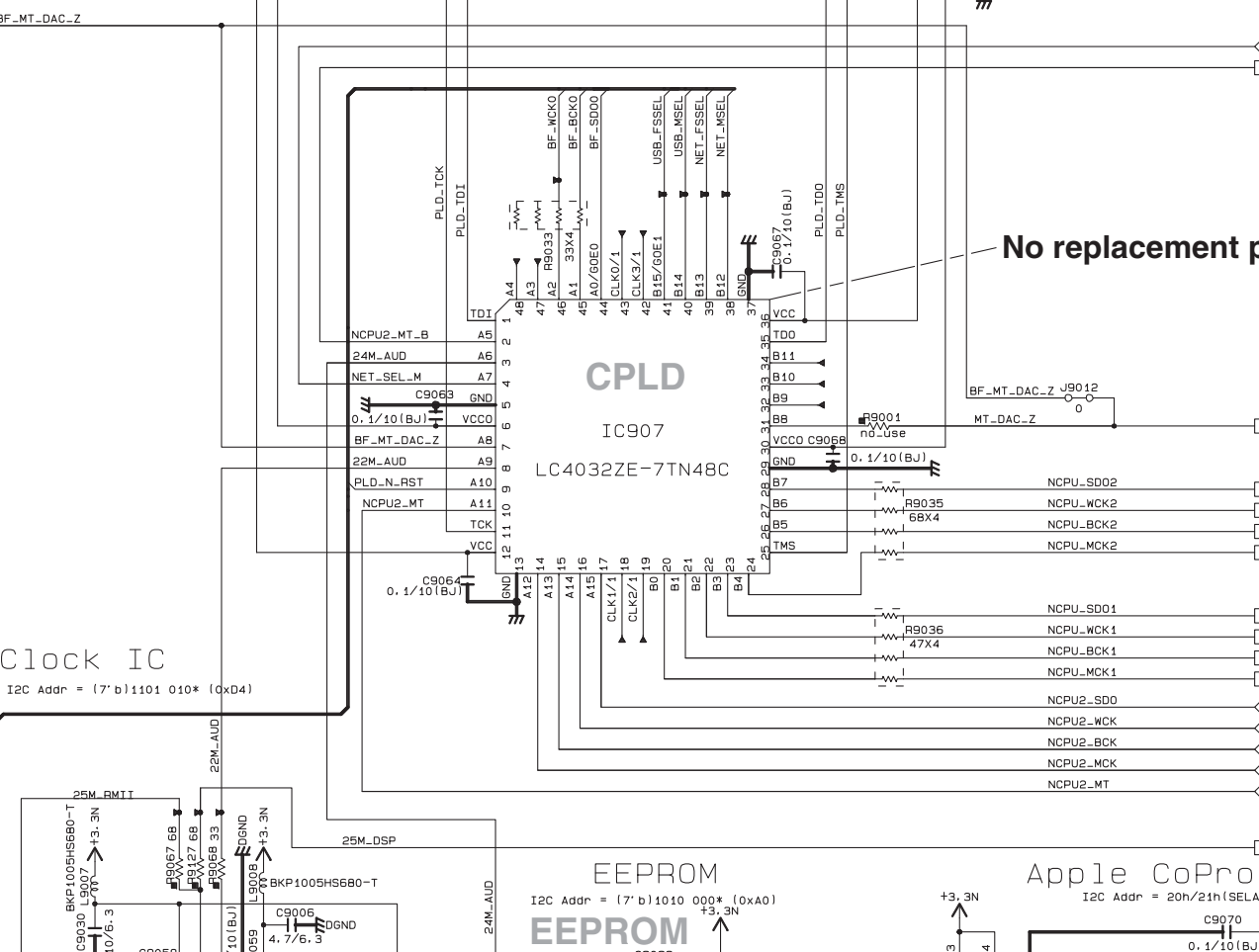
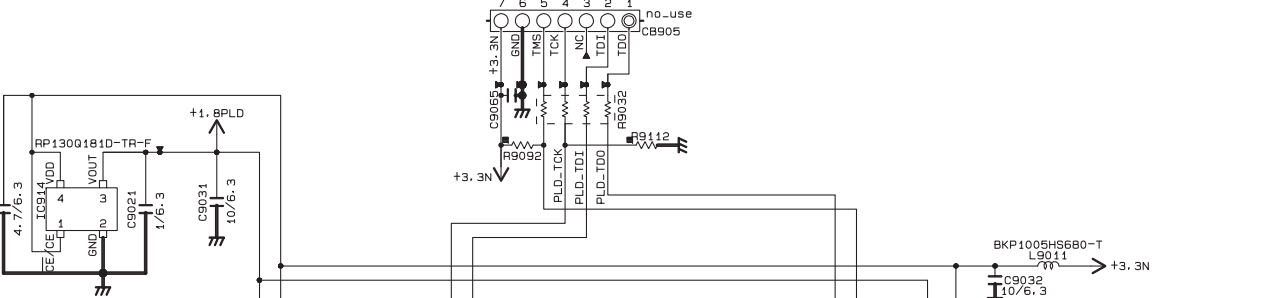
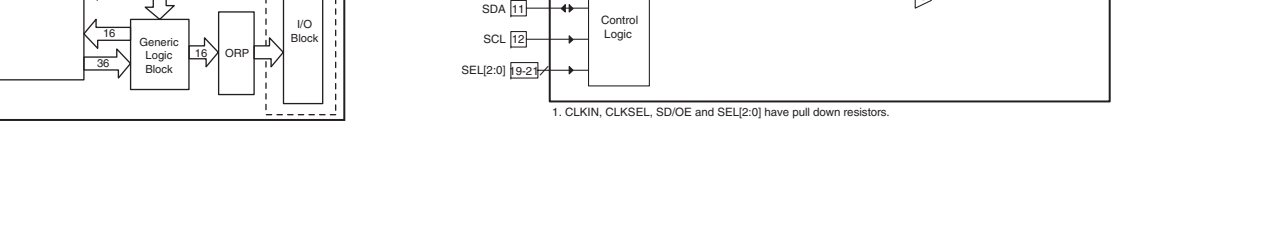
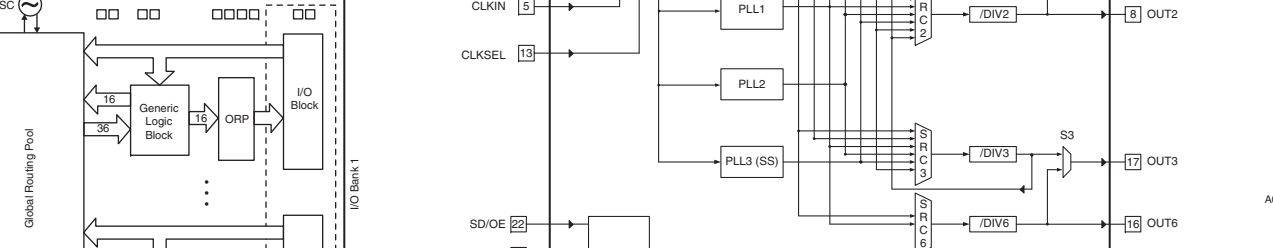
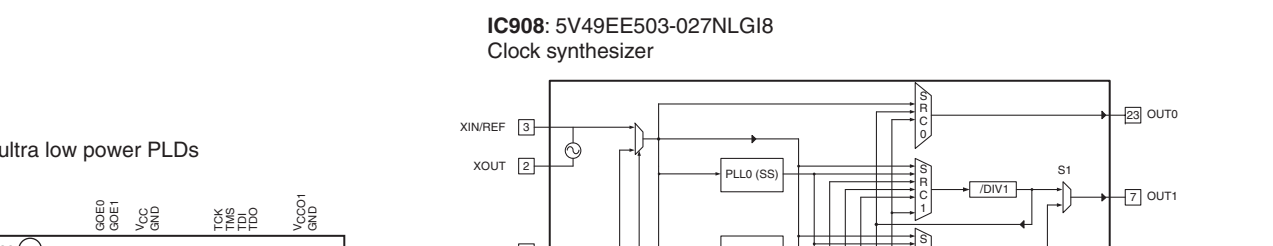
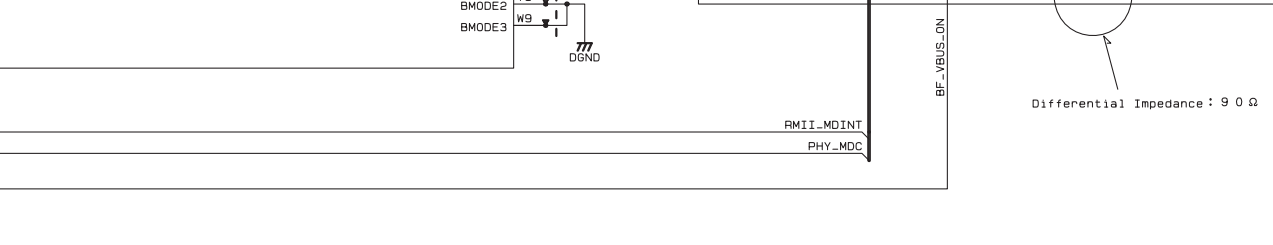
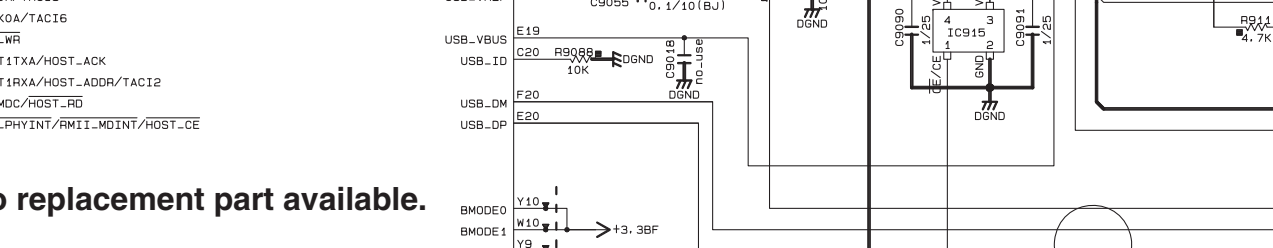
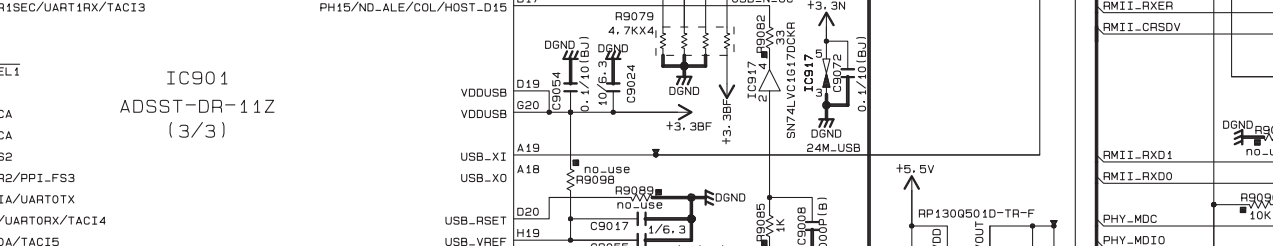
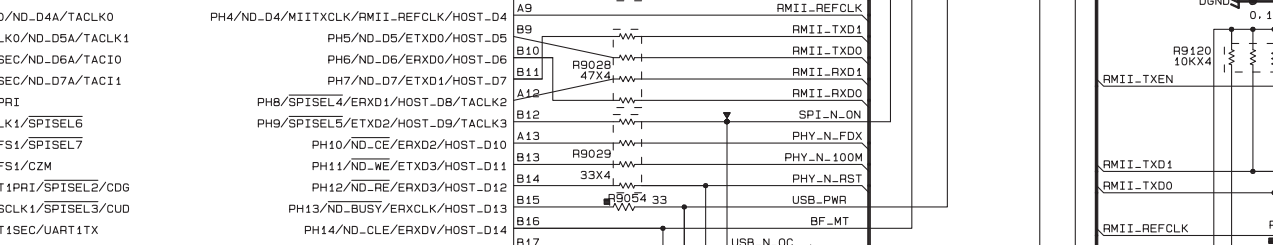
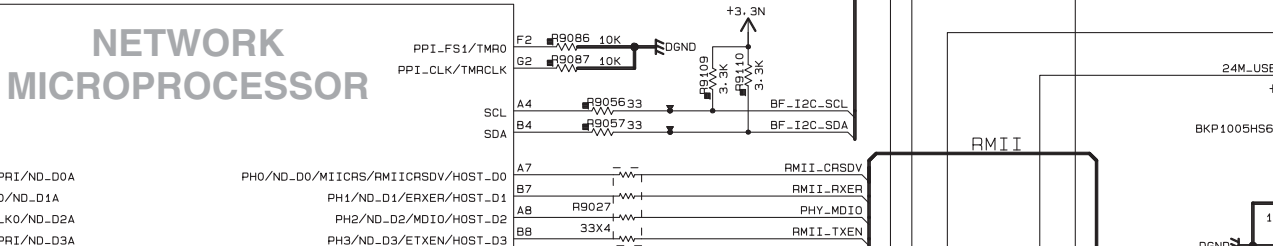
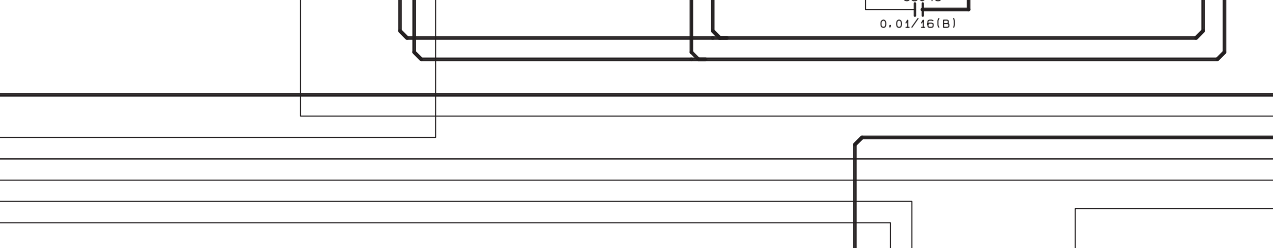
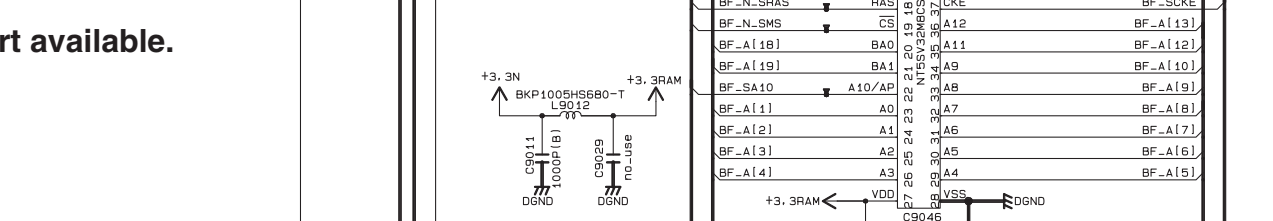
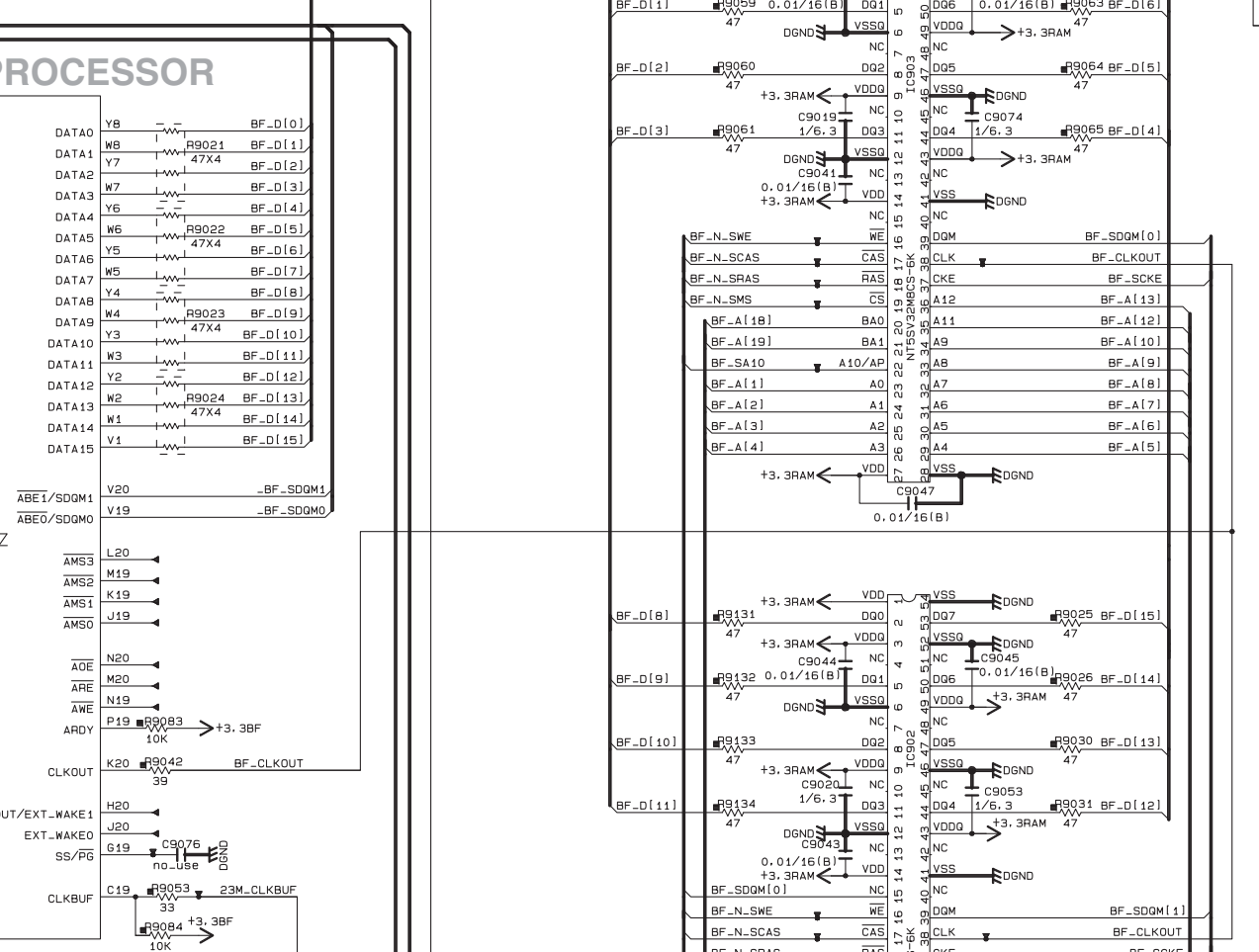
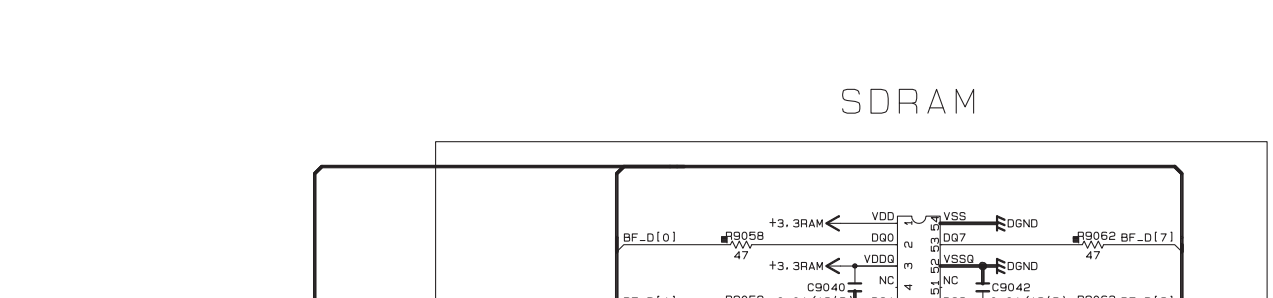
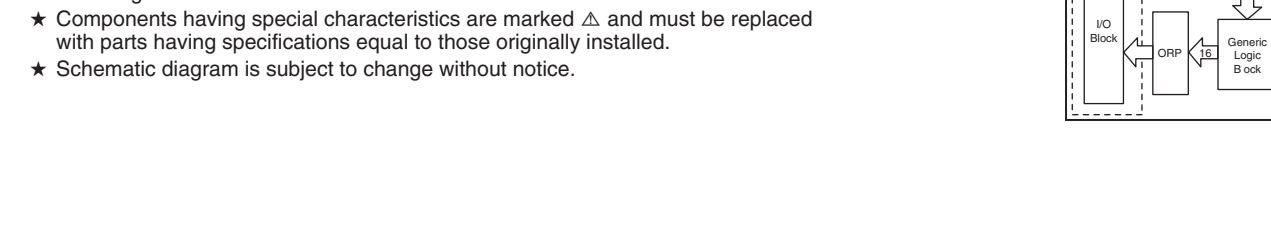
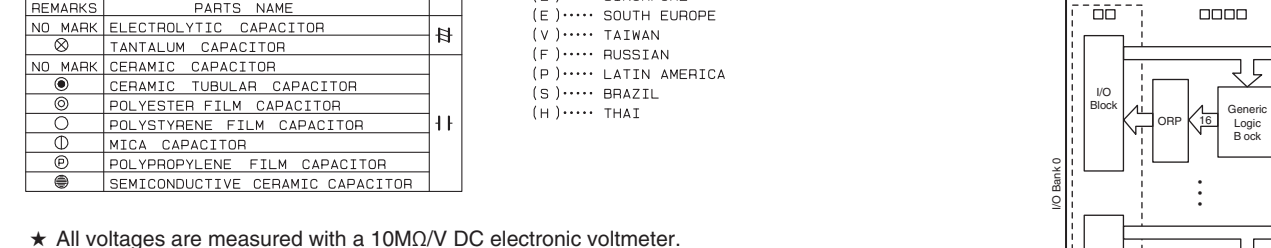
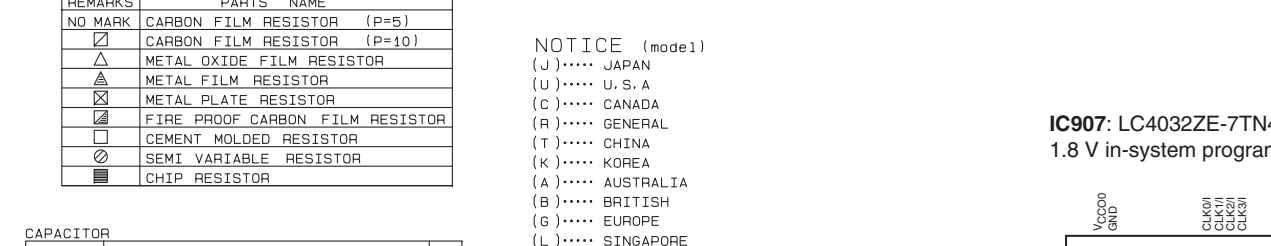
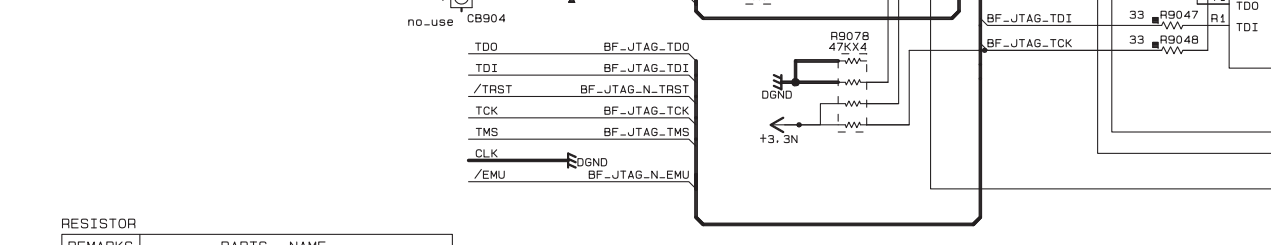
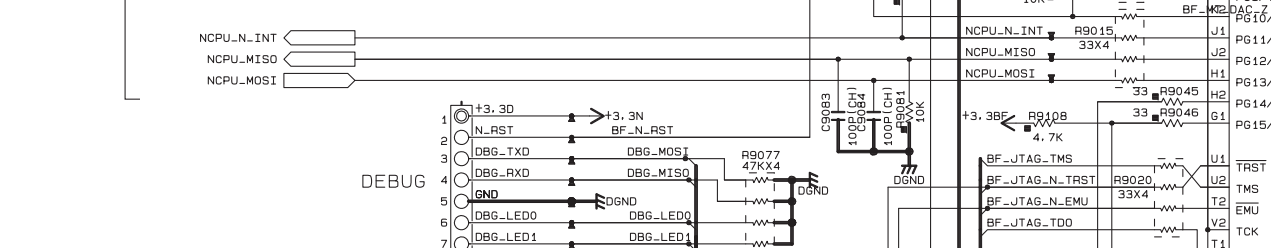
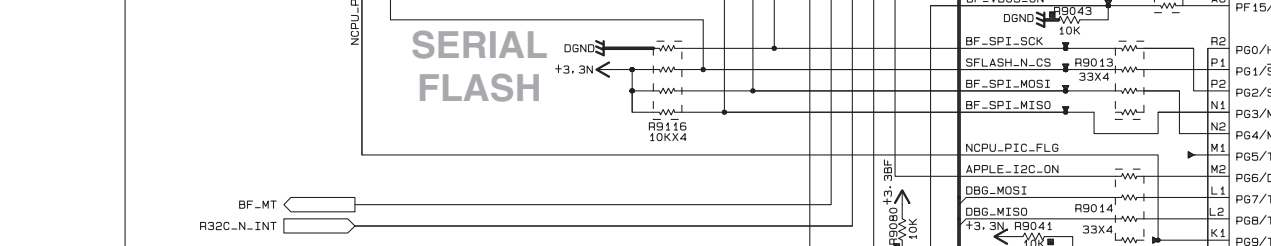
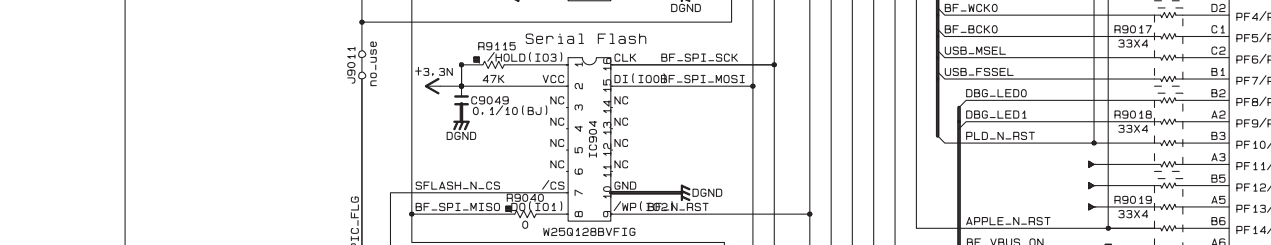
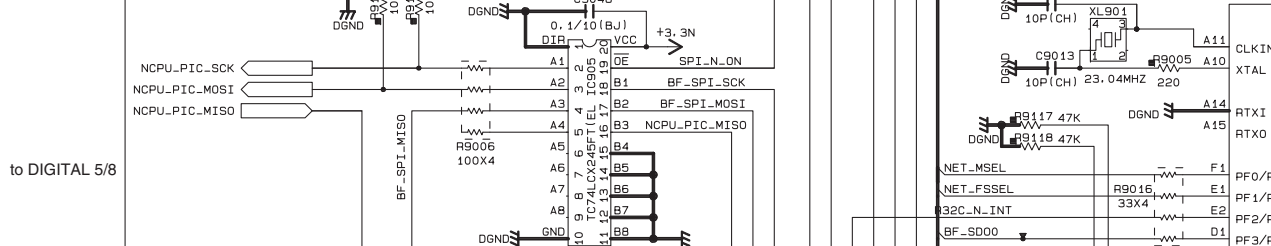
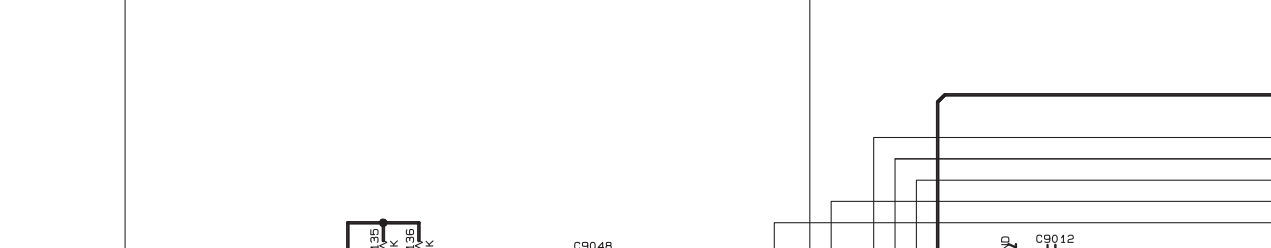
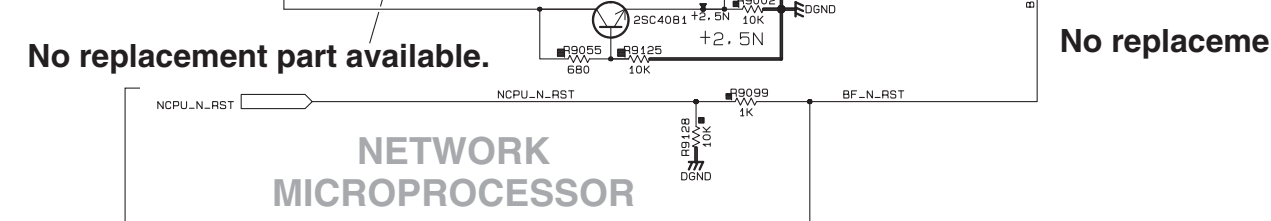
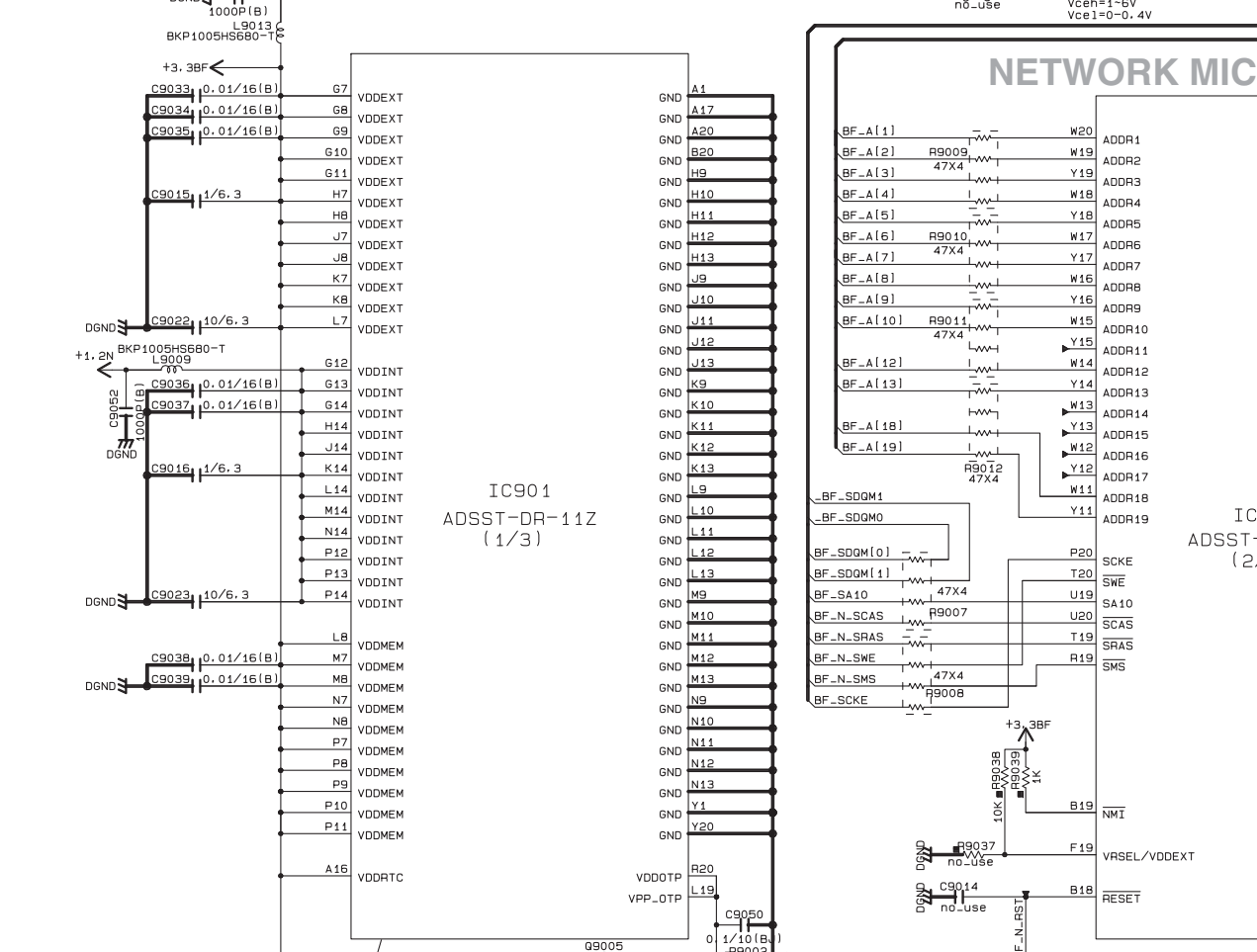
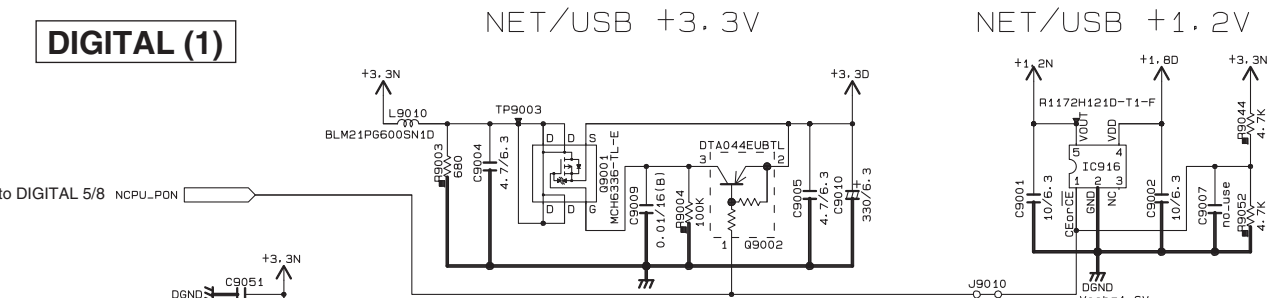
CAPACITOR

RESISTOR



DIGITAL 6/8

DIGITAL (1)



★ All voltages are measured with a 10M $\Omega$ /DC electronic voltmeter.

★ Components having special characteristics are marked A, and must be replaced with parts having specifications equal to those originally installed.

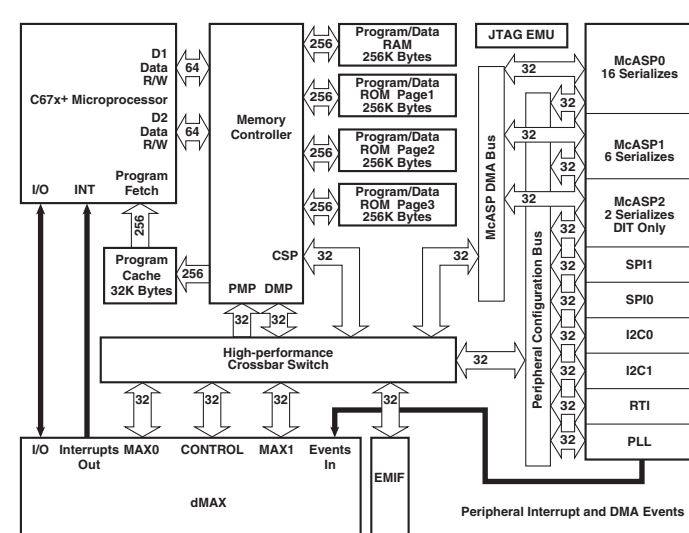
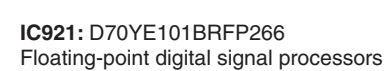
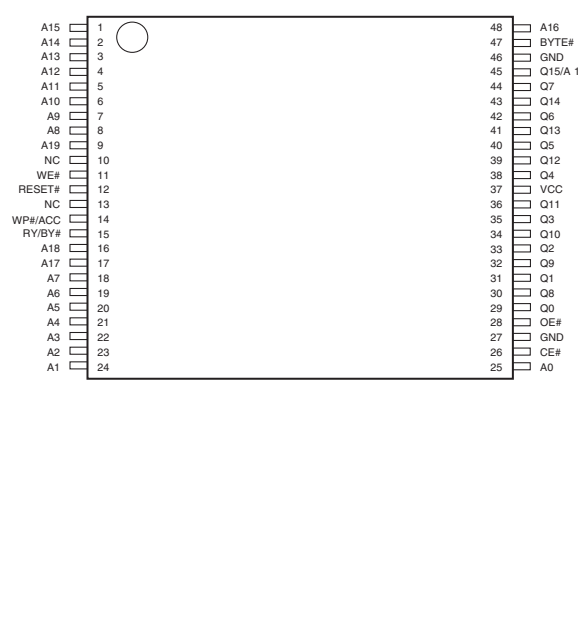
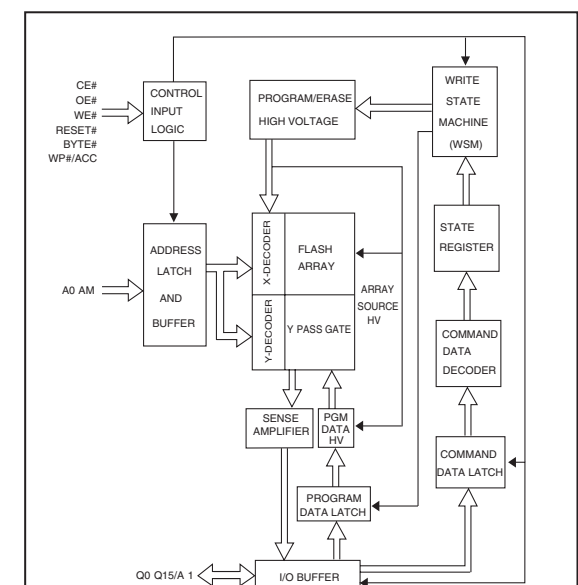
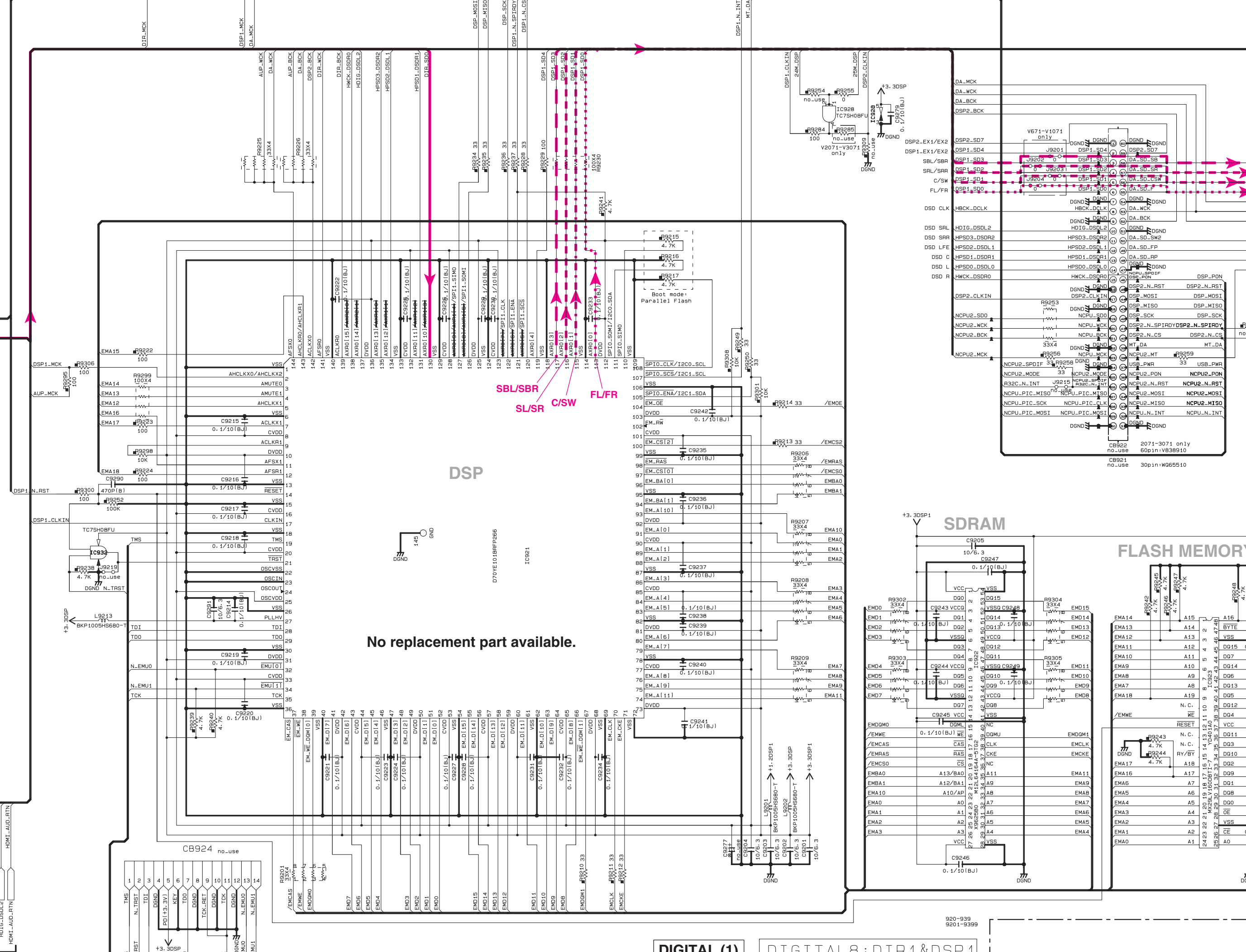
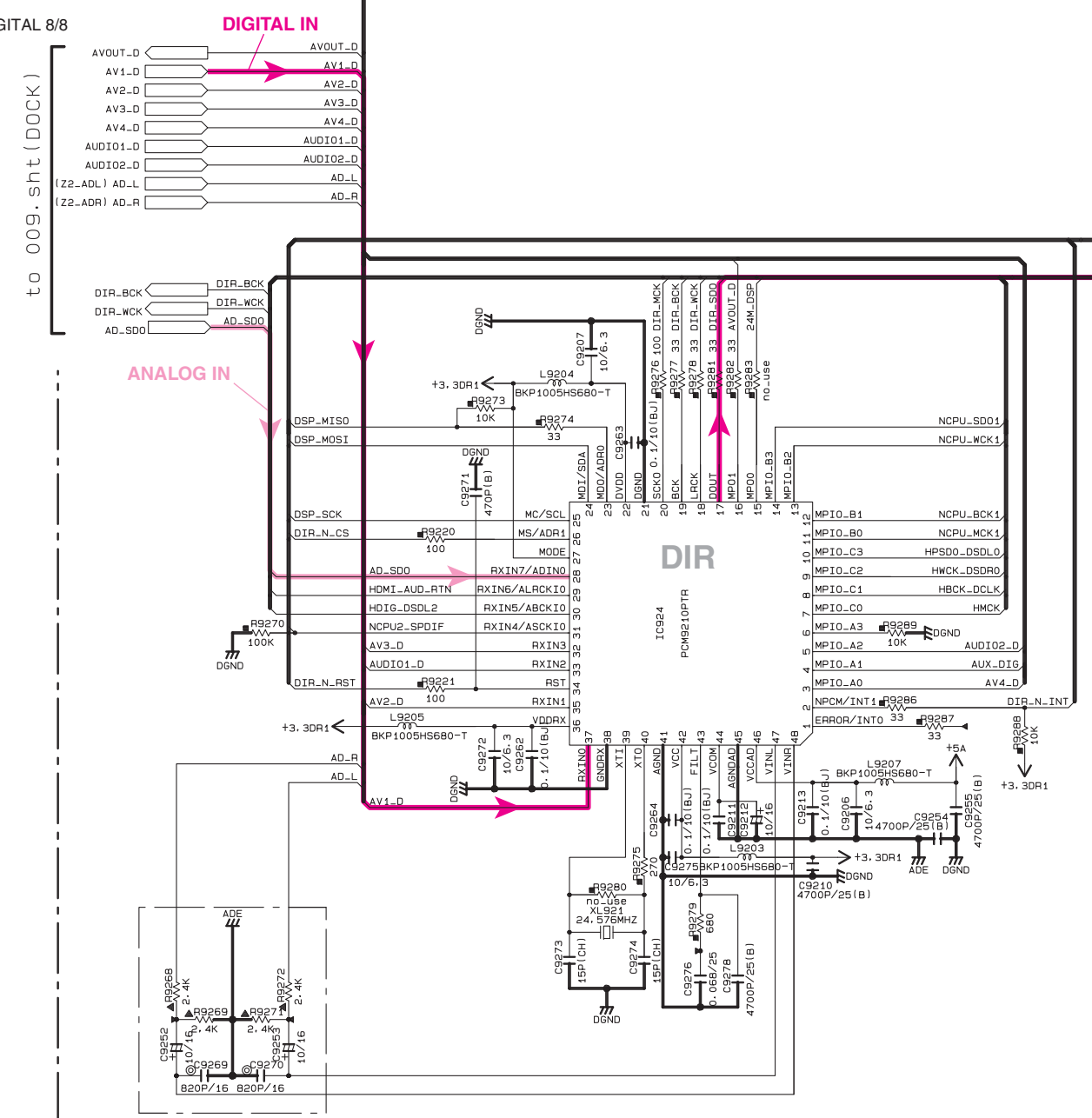
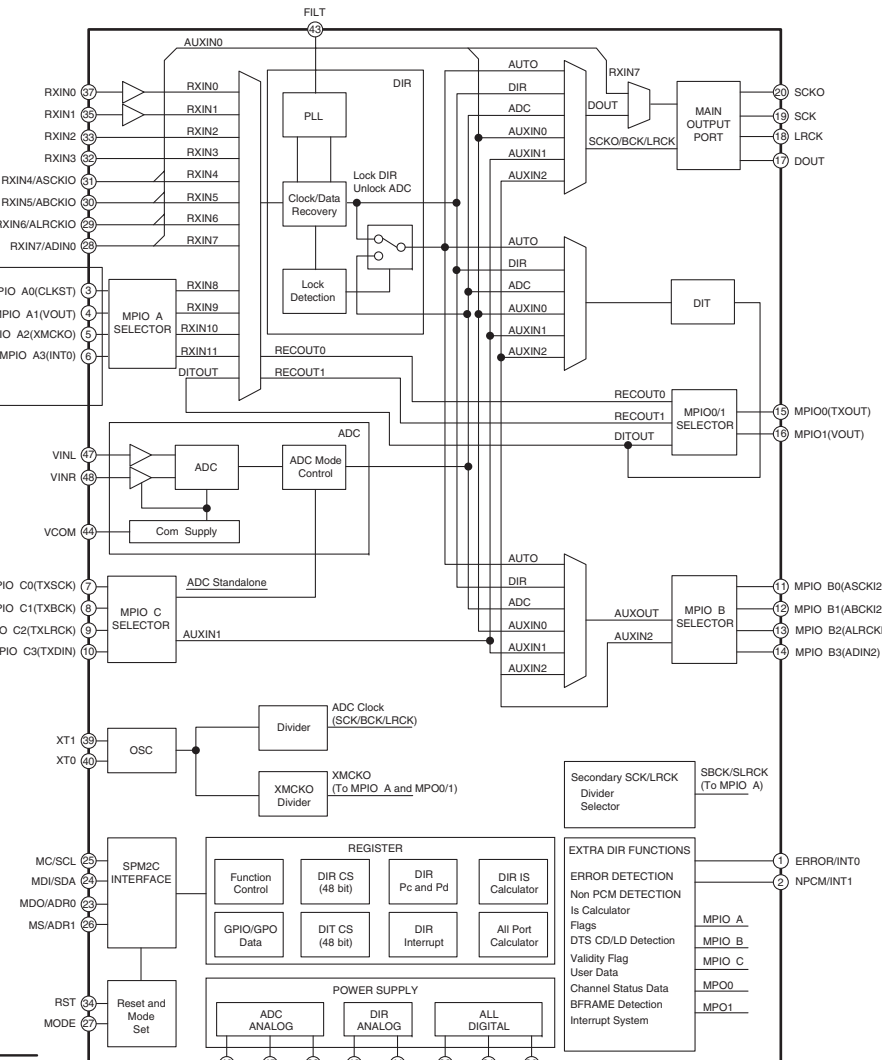
★ Schematic diagram is subject to change without notice.



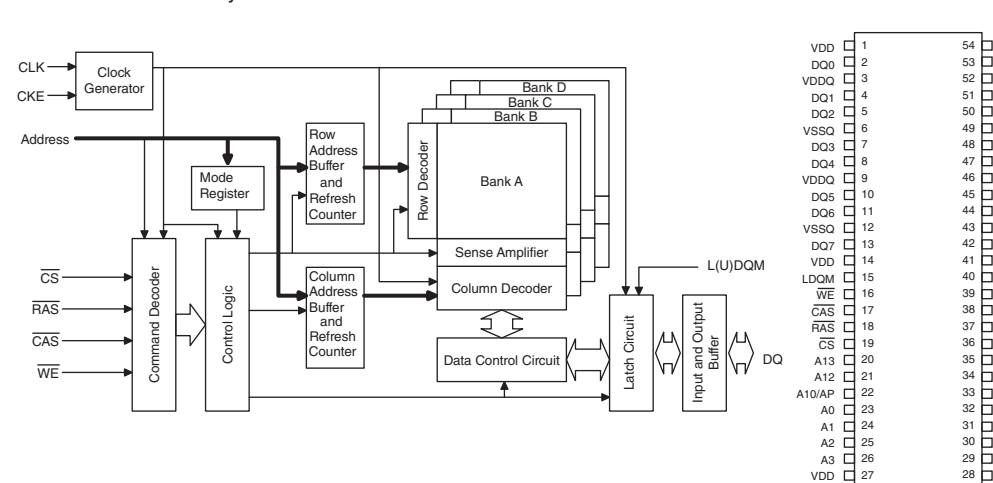
1

```
NOTICE (model)
(J)..... JAPAN
(U)..... U.S.A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERICA
(S)..... BRAZIL
(H)..... THAI
```

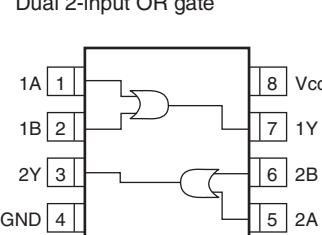
CAPACITOR		
REMARKS	PARTS NAME	
NO MARK	ELECTROLYTIC CAPACITOR	H
⊗	TANTALUM CAPACITOR	
NO MARK	CERAMIC CAPACITOR	H
⊗	CERAMIC TUBULAR CAPACITOR	
⊗	POLYESTER FILM CAPACITOR	
○	POLYSTYRENE FILM CAPACITOR	
①	MYCA CAPACITOR	
②	POLYPROPYLENE FILM CAPACITOR	
⊗	SEMICONDUCTIVE CERAMIC CAPACITOR	



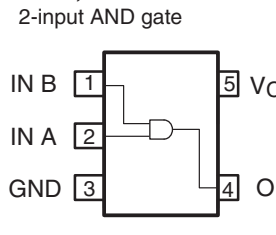
**IC922:** M12L64164A-5TG  
1M x 16-bit x 4 banks synchronous DRAM



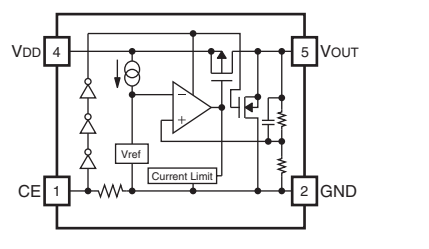
**IC926:** TC7WZ32FK (TE85L, F)  
Dual 2 input OR gate



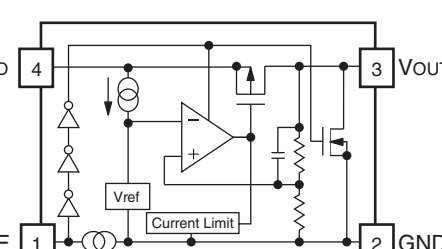
IC928, 932: TC7SH08FU



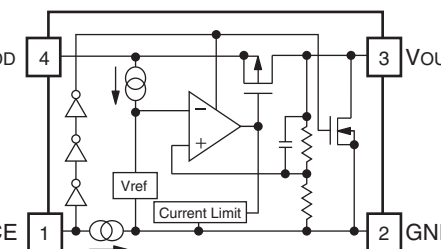
**IC929:** R1172H121D-T1-F  
CMOS-based positive-voltage regulator IC



**IC930:** RP130Q331D-TR-F  
Voltage regulator



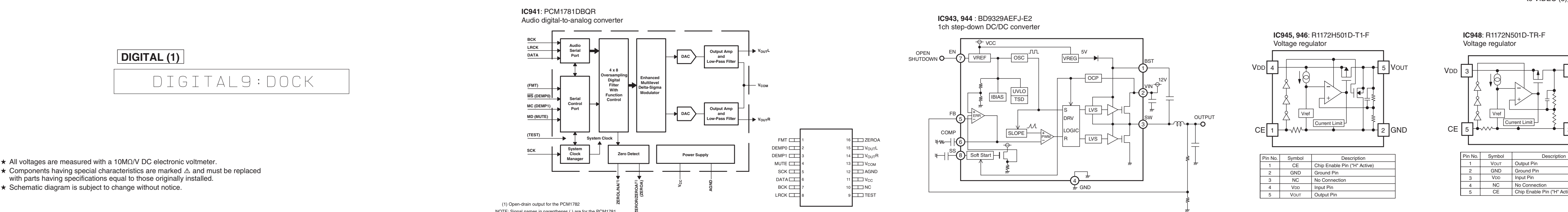
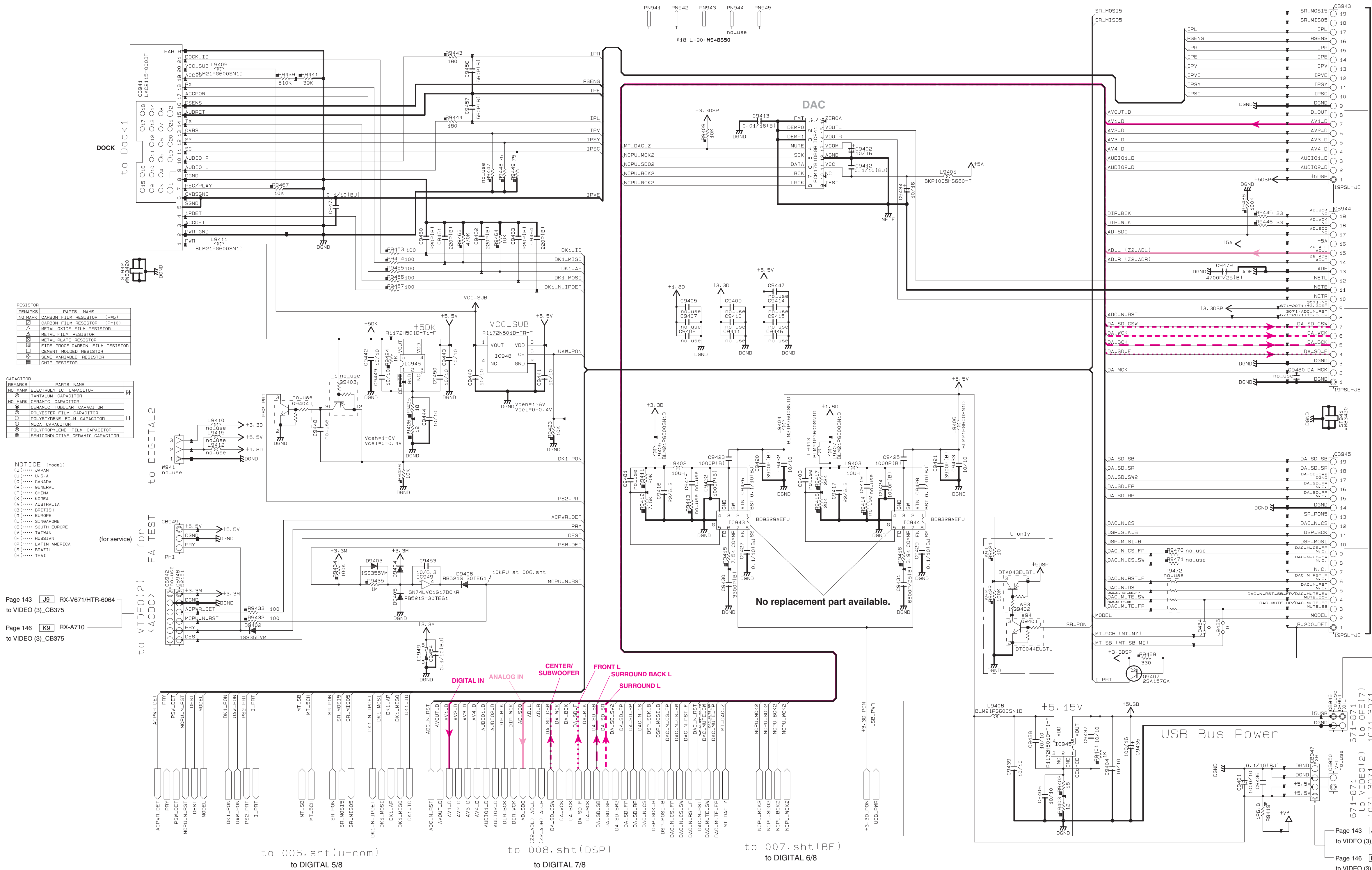
**IC931:** RP130Q5  
Voltage regulator



- ★ All voltages are measured with a 10M $\Omega$ /V DC electronic voltmeter.
- ★ Components having special characteristics are marked  $\Delta$  and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.



DIGITAL 8/8



★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.  
★ Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.  
★ Schematic diagram is subject to change without notice.

Page 136 [D4] RX-V671/HTR-6064 to OPERATION (2)\_CB459

Page 138 [D4] RX-A710 to OPERATION (2)\_CB459

Page 136 [F4] RX-V671/HTR-6064 to OPERATION (2)\_CB460

Page 138 [F4] RX-A710 to OPERATION (2)\_CB460

Page 136 [I4] RX-V671/HTR-6064 to OPERATION (2)\_CB461

Page 138 [J4] RX-A710 to OPERATION (2)\_CB461

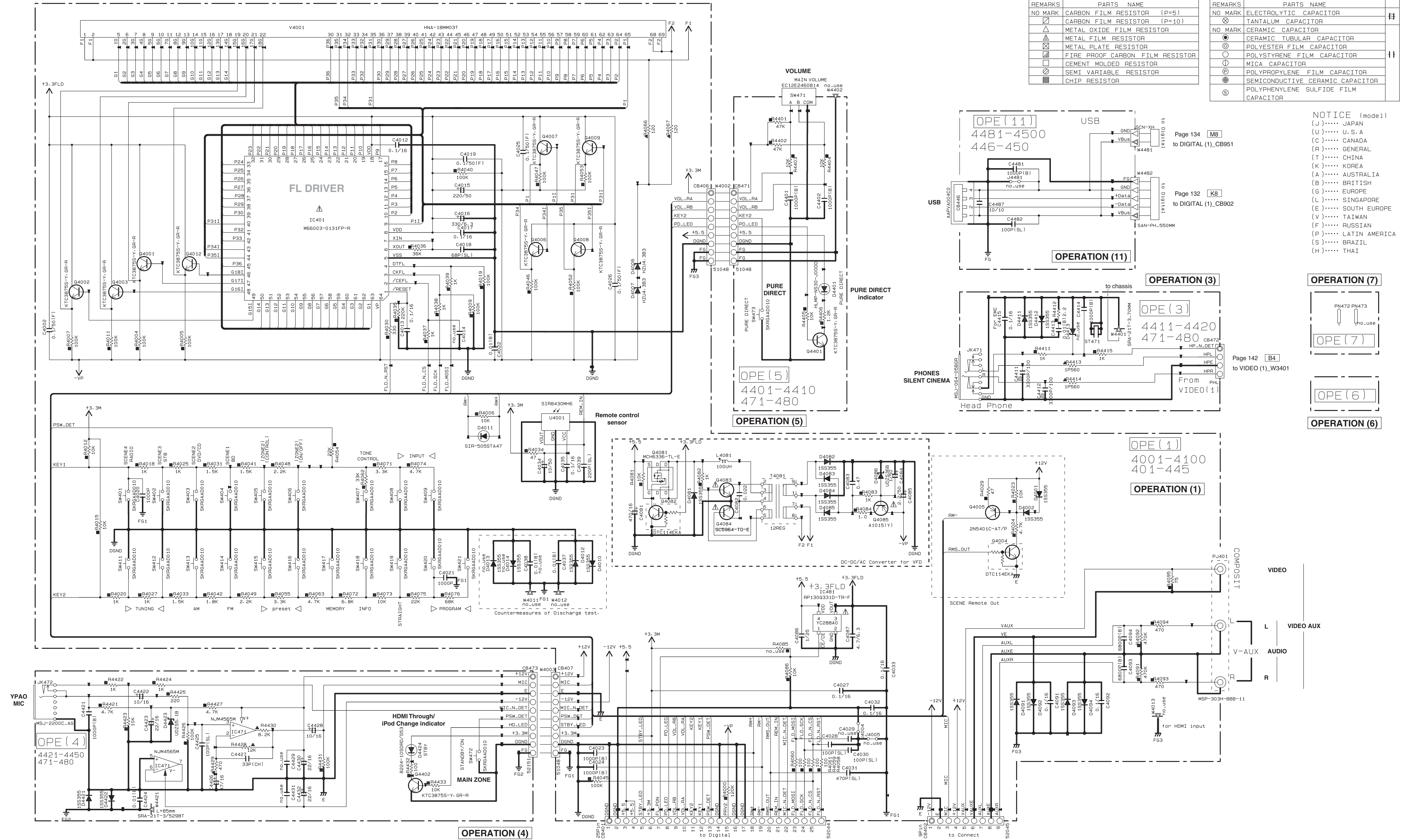
Page 135 [L2] RX-V671/HTR-6064 to OPERATION (11)\_W4481

Page 137 [M6] RX-A710 to OPERATION (11)\_W4481

Page 143 [J10] RX-V671/HTR-6064 to VIDEO (3)\_W3703

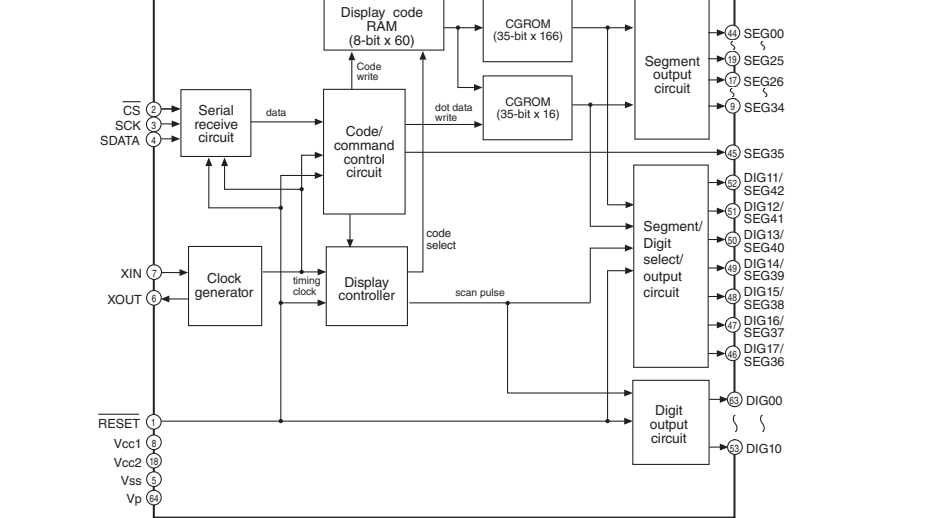
Page 146 [K10] RX-A710 to VIDEO (3)\_W3703





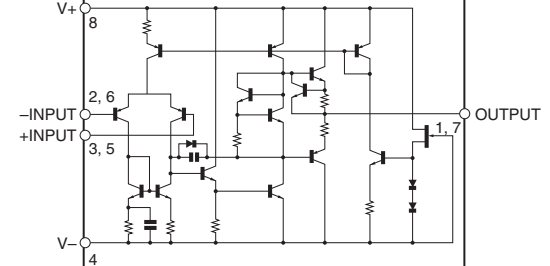
IC401: M66003-0131FP-R

16 digit 5 x 7 segment VFD controller/driver



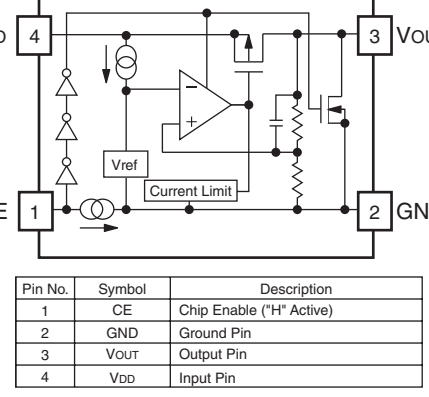
IC471: NJM4565M (TE1)

Dual operational amplifier



IC481: RP130Q331D-TR-F

Voltage regulator

Page 131 [K8]  
to DIGITAL (1)\_CB81Page 136 [K8]  
to OPERATION (2)\_CB458Key detection for A/D port.  
Key input (A/D) pull-up resistance 10 k-ohms

Ohm	0	+10 k	+10 k	+15 k	+15 k	+22 k	+33 k	+47 k	220 k	330 k
V	0 - 0.15	0.15 - 0.42	0.43 - 0.70	0.71 - 0.97	0.98 - 1.24	1.25 - 1.53	1.54 - 1.84	1.85 - 2.22	2.23 - 2.62	2.63 - 3.04
A/D conversion value (3.3V=255)	0 - 11	12 - 32	33 - 54	55 - 75	76 - 96	97 - 119	120 - 142	143 - 163	164 - 197	198 - 208
KEY1 (171 pin)	RADIO (SCENE4)	CD (SCENE3)	TV (SCENE2)	BD/DVD (SCENE1)	ZONE2 CONTROL	ZONE2 ON/OFF	INPUT	MAIN ZONE	CONTROL	CONTROL

Ohm	0	+10 k	+10 k	+15 k	+15 k	+22 k	+33 k	+47 k	+68 k	+100 k	+220 k	+680 k
V	0 - 0.15	0.16 - 0.42	0.43 - 0.70	0.71 - 0.99	1.00 - 1.27	1.28 - 1.56	1.57 - 1.86	1.87 - 2.14	2.15 - 2.39	2.40 - 2.65	2.66 - 2.91	2.92 - 3.17
A/D conversion value (3.3V=255)	0 - 11	12 - 32	33 - 54	55 - 77	78 - 99	100 - 121	122 - 144	145 - 166	167 - 186	187 - 205	206 - 226	227 - 246
KEY2 (170 pin)	PURE DIRECT	TUNING >>	TUNING <<	AM	FM	PRESET	PRESET	MEMORY	INFO	STRAIGHT	PROGRAM >	PROGRAM <

★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.  
★ Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.  
★ Schematic diagram is subject to change without notice.



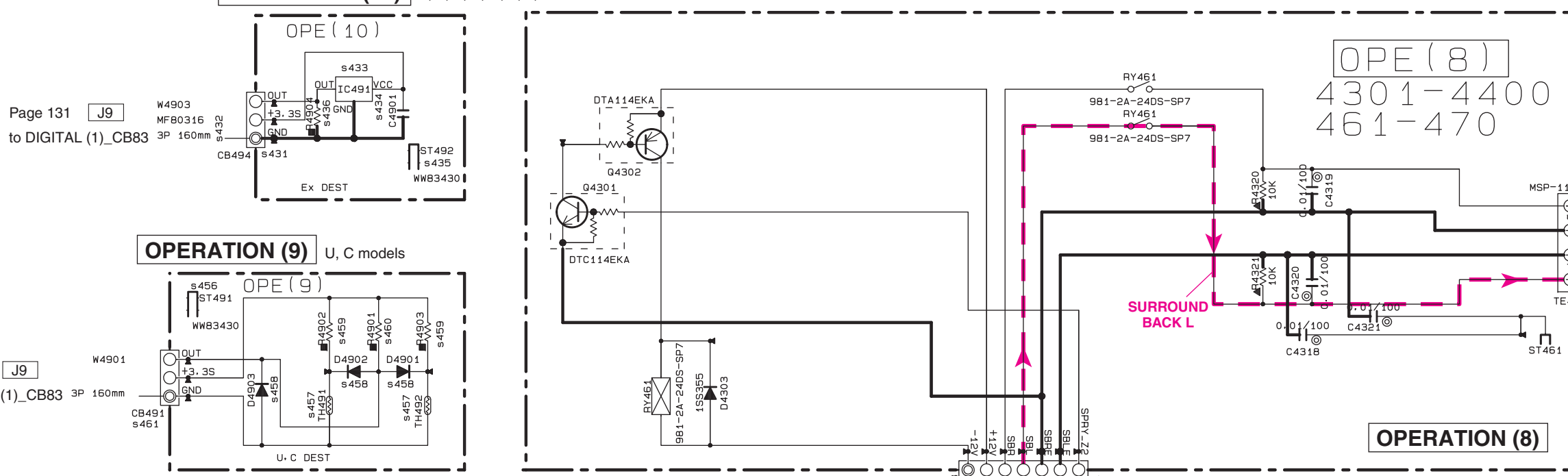
RESISTOR		PARTS NAME
REMARKS		
NO MARK	⊗	CARBON FILM RESISTOR (P=5)
⊗	⊗	CARBON FILM RESISTOR (P=10)
⊗	⊗	METAL OXIDE FILM RESISTOR
⊗	⊗	METAL FILM RESISTOR
⊗	⊗	METAL PLATE RESISTOR
⊗	⊗	THE PROOF CARBON FILM RESISTOR
⊗	⊗	CEMENT MOLDED RESISTOR
⊗	⊗	SEMI VARIABLE RESISTOR
⊗	⊗	CHIP RESISTOR

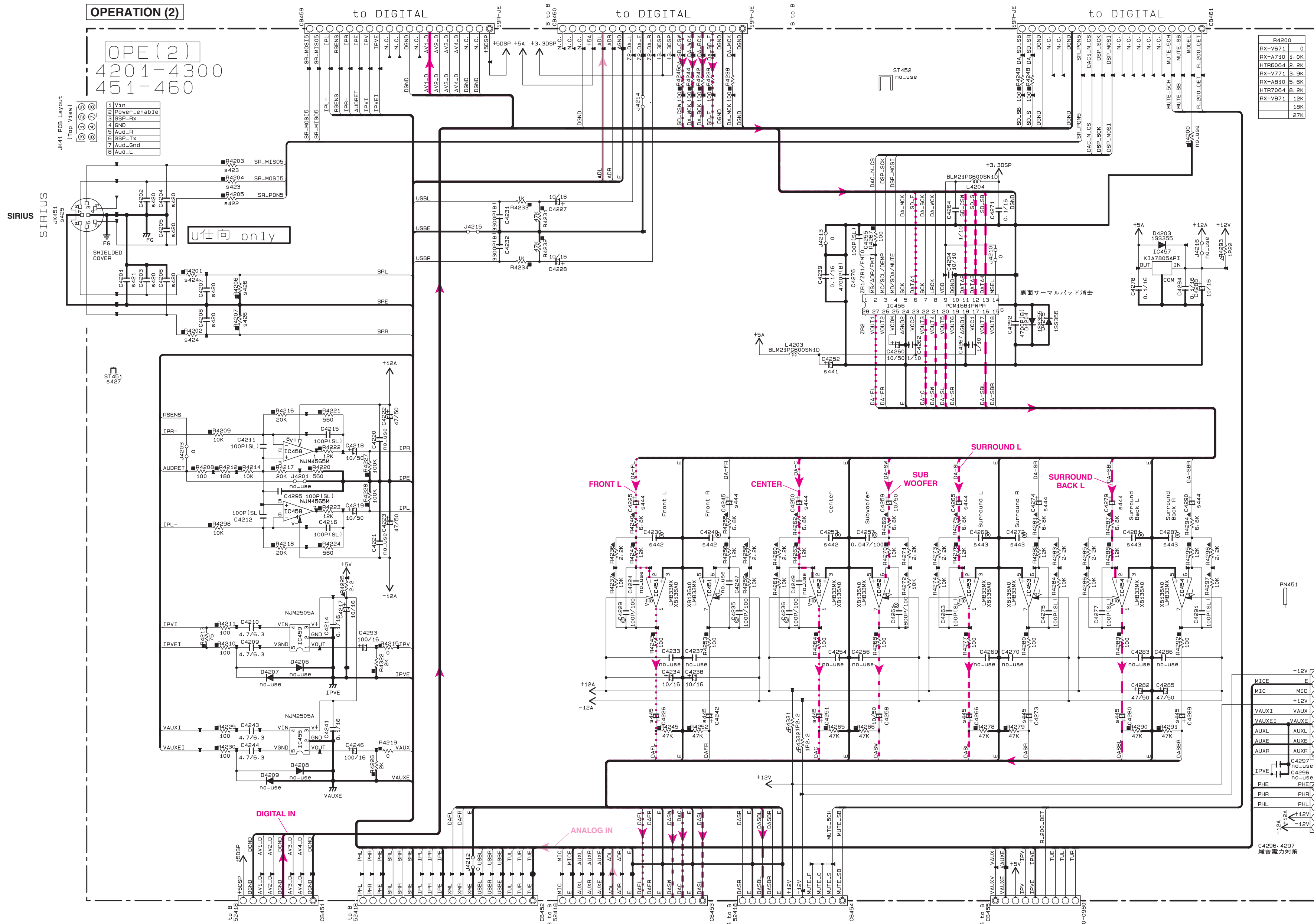
CAPACITOR		PARTS NAME
REMARKS		
NO MARK	⊗	ELECTROLYTIC CAPACITOR
⊗	⊗	TANTALUM CAPACITOR
⊗	⊗	CERAMIC CAPACITOR
⊗	⊗	CERAMIC TUBULAR CAPACITOR
⊗	⊗	POLYESTER FILM CAPACITOR
⊗	⊗	POLYESTER FILM CAPACITOR
⊗	⊗	MICA CAPACITOR
⊗	⊗	POLYPROPYLENE FILM CAPACITOR
⊗	⊗	SEMICONDUCTIVE CERAMIC CAPACITOR

```
NOTICE (model)
(J)..... JAPAN
(U)..... U. S. A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERICA
(S)..... BRAZIL
(H)..... THAI
```

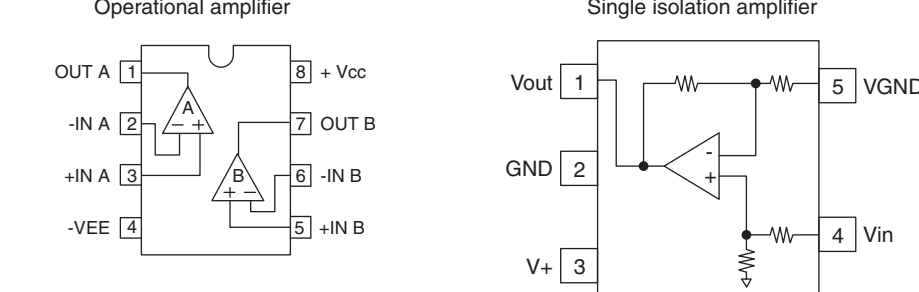
## R, T, A, B, G, F, L, S models



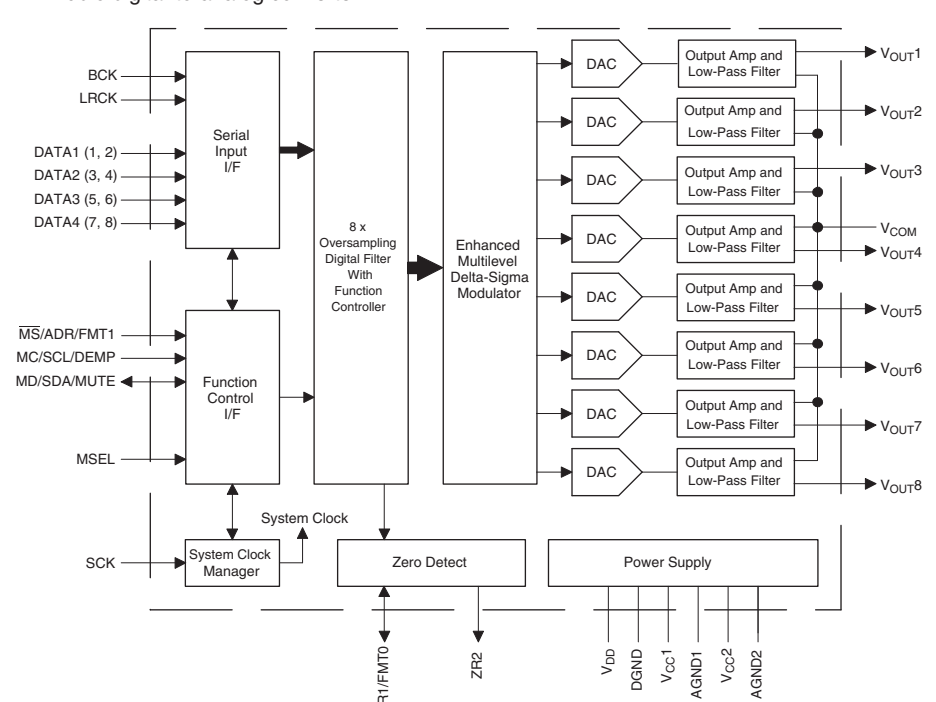
Destination Part List					
sXX	LOC	U	C	RTABLSFS	
s420	C4202-C4208	U06222 220P1SL1	X		X
s421	C4201	U06310 1000P1B	X	X	X
s422	R4205	RD35410 10	X	X	X
s423	R4203 R4204	RD35433	X	X	X
s424	R4201 R4202	RD35547 470	X	X	X
s425	JK451	WY66950 M0-58130-90	X	X	X
s426	R4206 R4207	RD25810 100K	X		
s427	ST451	X	V404050		V404050
s431	CB494	X	X	X	V187810 51048
s432	W4903	X	X	X	MF80316
s433	IC491	X	X		YA38140 UMC1274-ET4
s434	C4901	X	X	X	US13510 0.1/16
s435	ST492	X	X	X	WN83430
s436	R4904	X	X	X	RD28710 10K
s441	C4252	WV89490 10/71	WV89490 10/71	X	UR36747 47/50
s442	C4230-C4240	WY46670 820P/100	WY46680 820P/100	WY46670 820P/100	
s443	C4256-C4272 C4281-C4287	WJ60890 820P/100	WJ60890 820P/100	WY46670 820P/100	
s444	C4225-C4245 C4250-C4265 C4274-C4279 C4280	UR06710 10/50	UR06710 10/50		WK04180 10/16
s445	C4252-C4243 C4251-C4266 C427-C4280 C4289	WK04180 10/16	WK04180 10/16		UR06710 10/50
s447	W4301	X	X	X	MF00914
s453	CB456	X	X	X	V187830 51048
s456	ST491	WN83430		WN83430	X
s457	TH491 TH492	WT68930 WCS94103.1	WT68930 WCS94103.1		
s458	D4901-D4903	VT33290 153350	VT33290 153350		X
s459	R4902 R4903	RD35610 1K	RD35610	X	X
s460	R4901	RD28710 10K		RD28710 10K	X
s461	CB491	V187810 51048		V187810 51048	X
s462	W4901	MF80316		MF80316	X



IC455, 459: NJM2505A



**IC456:** PCM1681PWPR  
Audio digital-to-analog converter

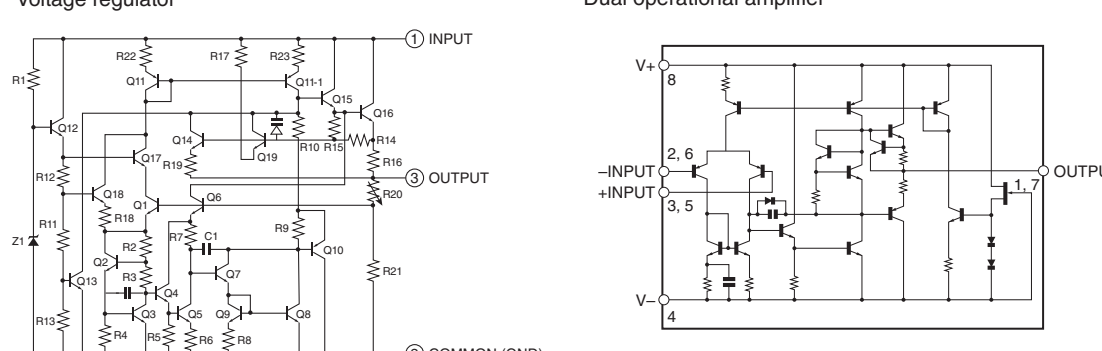


to OPERATION (1)\_CB402

to VIDEO (10)\_CB38  
(B T A B C E L C m)

(R, I, A, B, G, F, L, S) no

**IC458: NJM4565M (TE1)**  
Dual operational amplifiers



- ★ All voltages are measured with a 10M $\Omega$ /V DC electronic voltmeter.
- ★ Components having special characteristics are marked  $\Delta$  and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.



# OPERATION 1/2

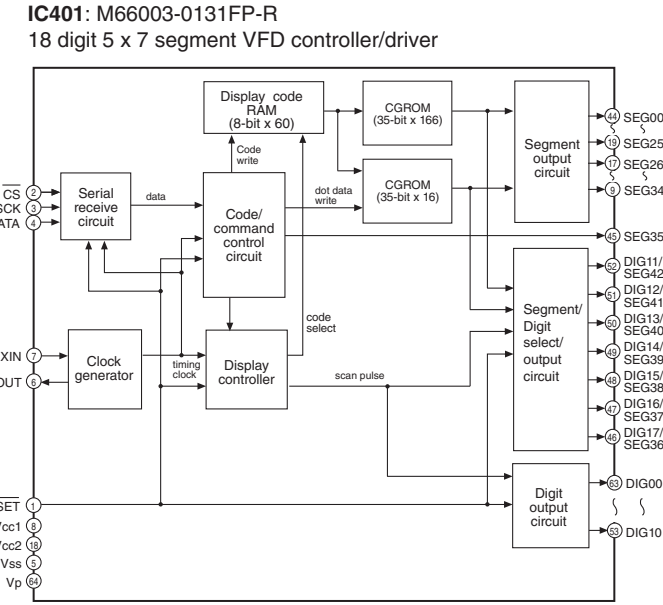
RX-A710

RX-V671/HTR-6064/RX-A710

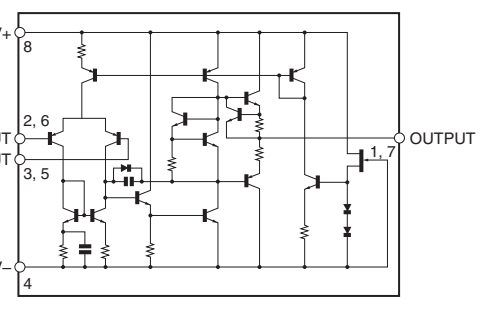
OPERATION (1)  
4001-4100  
401-440

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
⊙	CERAMIC TUBULAR CAPACITOR
○	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
①	MICA CAPACITOR
⊙	POLYPROPYLENE FILM CAPACITOR
⊙	SEMICONDUCTIVE CERAMIC CAPACITOR
⊙	POLYPHENYLENE SULFIDE FILM CAPACITOR

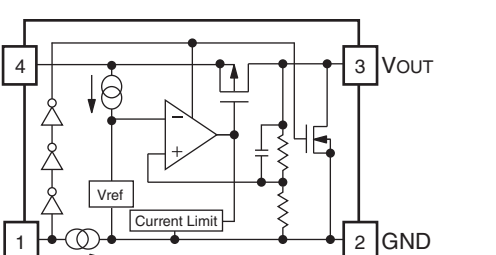
NOTICE (model)  
(J)..... JAPAN  
(U)..... U.S.A  
(C)..... CANADA  
(R)..... GENERAL  
(T)..... CHINA  
(K)..... KOREA  
(A)..... AUSTRALIA  
(B)..... BRITISH  
(G)..... EUROPE  
(L)..... SINGAPORE  
(E)..... SOUTH EUROPE  
(V)..... TAIWAN  
(F)..... RUSSIAN  
(P)..... LATIN AMERICA  
(S)..... BRAZIL  
(H)..... THAI



IC401: M66003-0131FP-R



IC471: NJM4565M (TE1)



Pin No.	Symbol	Description
1	CE	Chip Enable ("H" Active)
2	GND	Ground Pin
3	VOUT	Output Pin
4	Vin	Input Pin

Page 134 [M8] to DIGITAL (1)\_CB951

Page 132 [K8] to DIGITAL (1)\_CB902

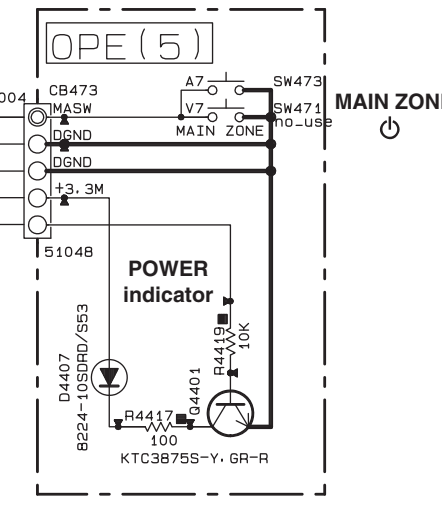
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
⊗	CARBON FILM RESISTOR (P=10)
⊗	METAL OXIDE FILM RESISTOR
⊗	METAL FILM RESISTOR
⊗	METAL PLATE RESISTOR
⊗	FIRE PROOF CARBON FILM RESISTOR
⊗	CEMENT MOLDED RESISTOR
⊗	SEMI VARIABLE RESISTOR
⊗	CHIP RESISTOR

Key detection for A/D port  
Key input (A/D) pull-up resistance 10 k-ohms

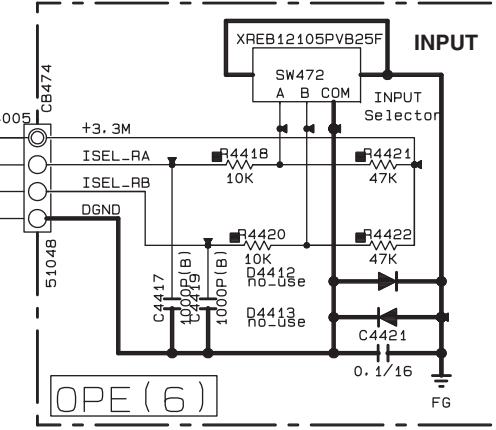
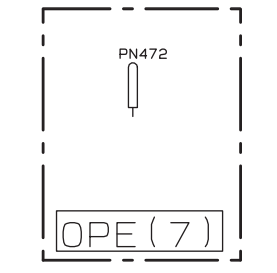
Ohm	0	+10 k	+10 k	+15 k	+15 k	+22 k	22.0 k	33.0 k
V	0 - 0.15	0.15 - 0.42	0.43 - 0.70	0.71 - 0.97	0.98 - 1.24	1.25 - 1.53	2.23 - 2.62	2.63 - 3.04
A/D conversion value (3.3 V=255)	0 - 11	12 - 32	33 - 54	55 - 75	76 - 96	97 - 119	182 - 197	198 - 209
KEY1 (171 pin)	RADIO (SCENE4)	CD (SCENE3)	TV (SCENE2)	BD/DVD (SCENE1)	ZONE2 CONTROL	ZONE2 ON/OFF	MAIN ZONE (power)	ZONE CONTROL

Ohm	0	+10 k	+10 k	+15 k	+15 k	+22 k	+33 k	+47 k	+68 k	+100 k
V	0 - 0.15	0.16 - 0.42	0.43 - 0.70	0.71 - 0.99	1.00 - 1.27	1.28 - 1.56	1.57 - 1.86	1.87 - 2.14	2.15 - 2.39	2.40 - 2.65
A/D conversion value (3.3 V=255)	0 - 11	12 - 32	33 - 54	55 - 77	78 - 99	100 - 121	122 - 144	145 - 166	167 - 186	187 - 205
KEY2 (170 pin)	PURE DIRECT	TUNING	TUNING	AM	FM	PRESET	PRESET	MEMORY	INFO	STRAIGHT

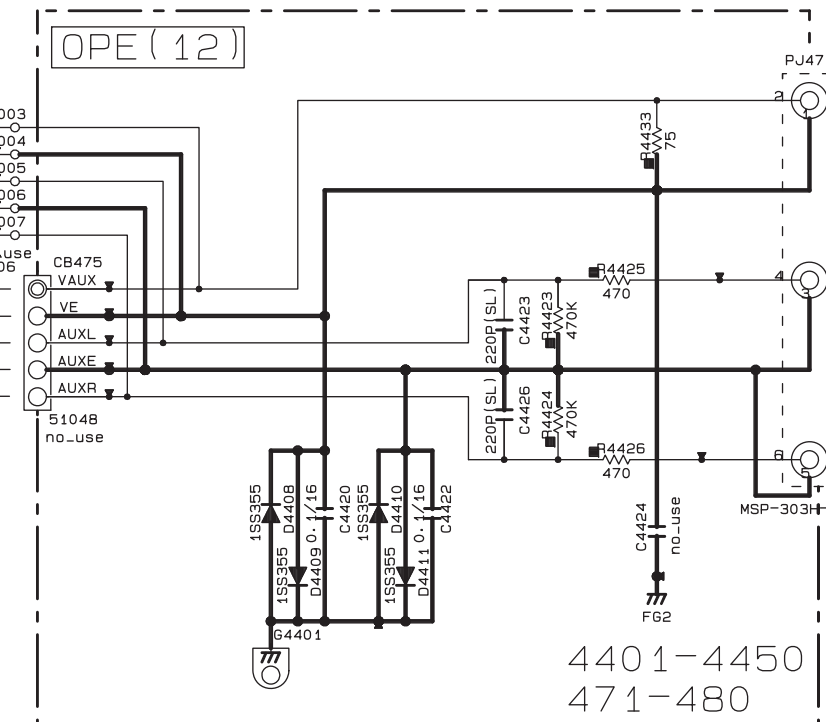
## OPERATION (5)



## OPERATION (7)



## OPERATION (6)



## OPERATION (12)

4401-4450  
471-480

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

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Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

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Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (1)\_W3401

Page 131 [K8] to DIGITAL (1)\_CB81

Page 138 [K8] to OPERATION (2)\_CB458

Page 145 [B4] to VIDEO (



## OPERATION 2/2

REMARKS	PARTS NAME
NO MARK CARBON FILM RESISTOR (P=5)	
NO MARK CARBON FILM RESISTOR (P=10)	
METAL OXIDE FILM RESISTOR	
METAL FILM RESISTOR	
METAL PLATE RESISTOR	
FIRE PROOF CARBON FILM RESISTOR	
CEMENT MOLDED RESISTOR	
BRITISH	
EUROPE	
SINGAPORE	
SOUTH EUROPE	
TAIWAN	
RUSSIAN	
LATIN AMERICA	
BRAZIL	
THAI	
CHIP RESISTOR	

REMARKS	PARTS NAME
NO MARK ELECTROLYTIC CAPACITOR	
TANTALUM CAPACITOR	
NO MARK CERAMIC CAPACITOR	
CERAMIC TUBULAR CAPACITOR	
POLYESTER FILM CAPACITOR	
POLYSTYRENE FILM CAPACITOR	
MICA CAPACITOR	
POLYPROPYLENE FILM CAPACITOR	
SEMICONDUCTIVE CERAMIC CAPACITOR	

NOTICE (model)

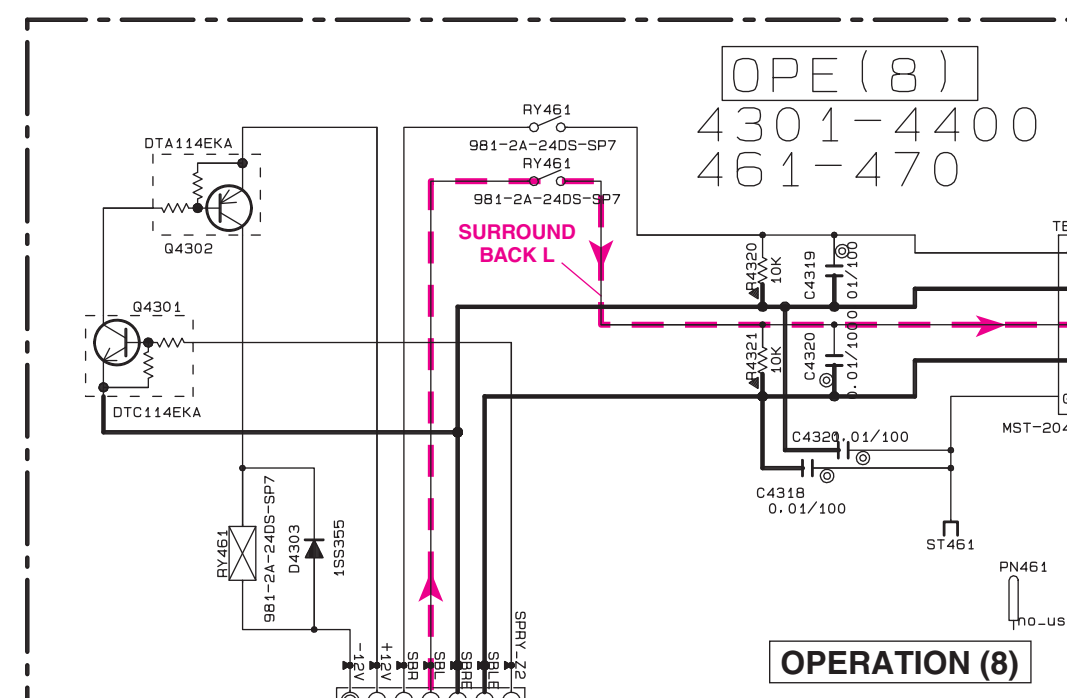
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(U)..... U.S.A  
(C)..... CANADA  
(R)..... GENERAL  
(T)..... CHINA  
(K)..... KOREA  
(A)..... AUSTRALIA  
(B)..... BRITISH  
(E)..... EUROPE  
(L)..... SINGAPORE  
(S)..... SOUTH EUROPE  
(V)..... TAIWAN  
(F)..... RUSSIAN  
(P)..... LATIN AMERICA  
(S)..... BRAZIL  
(H)..... THAI

## OPERATION (10) A model

Page 131 [J9]  
to DIGITAL (1)\_CB83

## OPERATION (9) U, C models

Page 131 [J9]  
to DIGITAL (1)\_CB83 3P 100mm



Page 145 [D3]  
to VIDEO (1)\_CB347

Page 134 [M6]  
to DIGITAL (1)\_CB945

## OPERATION (2)

4201-4300  
451-460

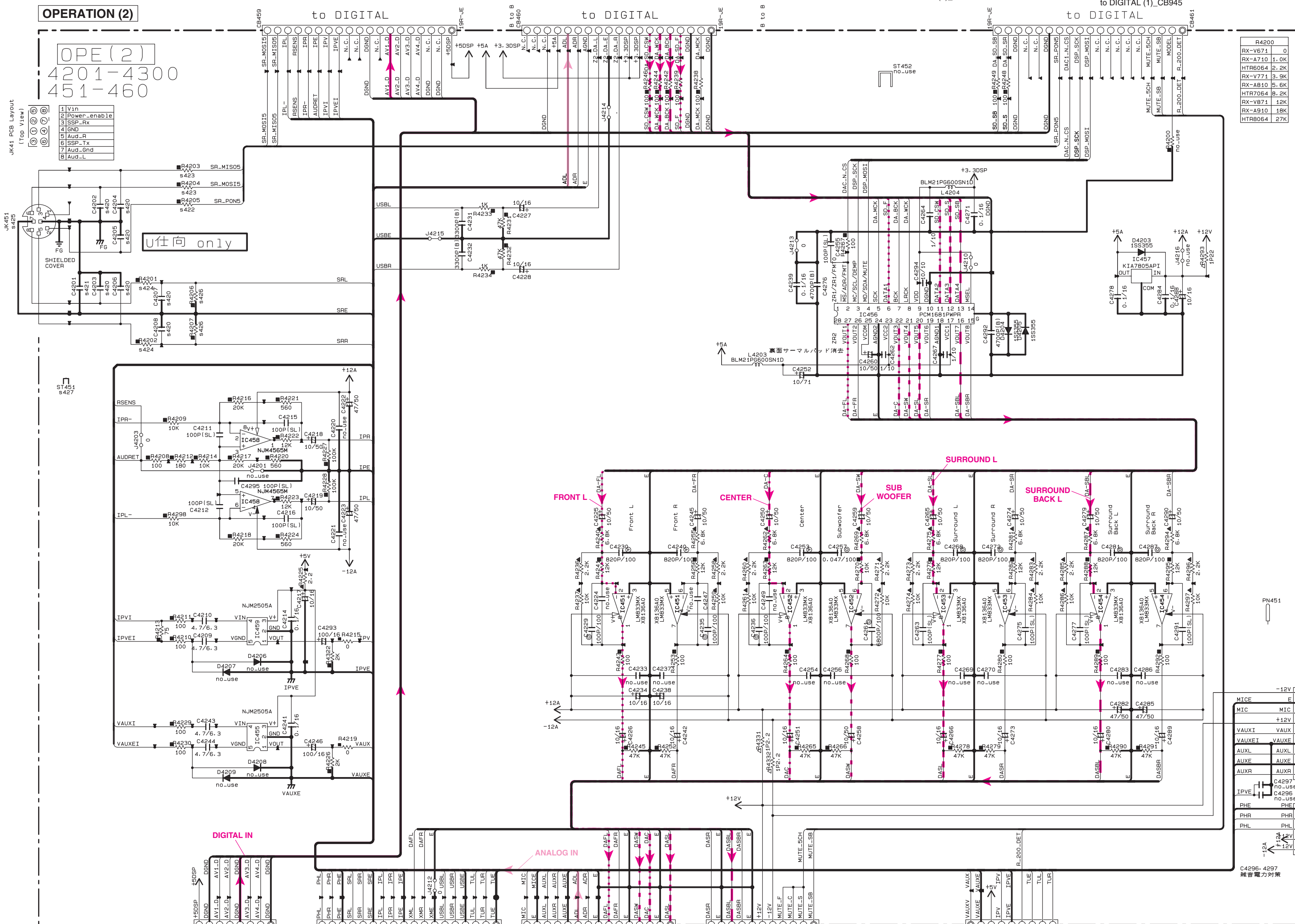
JK41 PCB Layout  
(Top View)

1 V10  
2 Power-emb1a  
3 SSP\_Rx  
4 GND  
5 AUG\_R  
6 SSP\_Tx  
7 AUG\_GND  
8 AUG\_L

u仕向 only

Page 134 [M2]  
to DIGITAL (1)\_CB943

Page 134 [M4]  
to DIGITAL (1)\_CB944



Page 140 [A3]  
to MAIN (1)\_CB152

Page 140 [C5]  
to MAIN (1)\_CB153

Page 140 [C6]  
to MAIN (1)\_CB154

Page 140 [C7]  
to MAIN (1)\_CB155

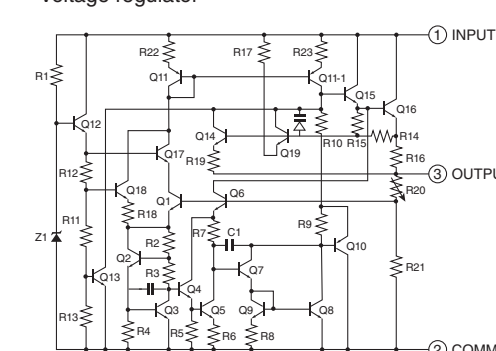
Page 144 [J6]  
to VIDEO (1)\_CB302

to VIDEO

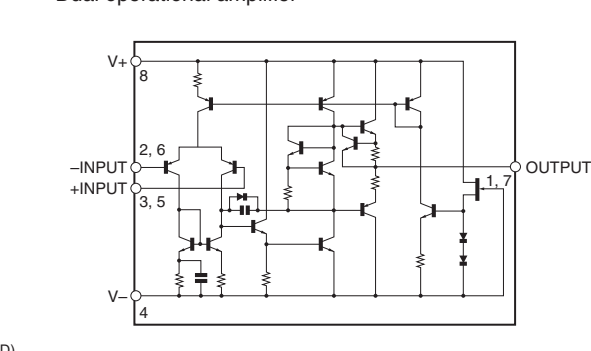
Page 137 [H9]  
to OPERATION (1)\_CB402

Page 146 [F4]  
to VIDEO (10)\_CB383  
(A model)

IC457: KIA7805API  
Voltage regulator

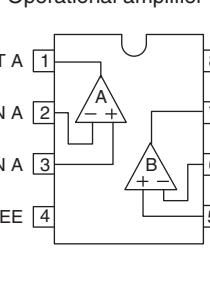


IC458: NJM4555M (TE1)  
Dual operational amplifier

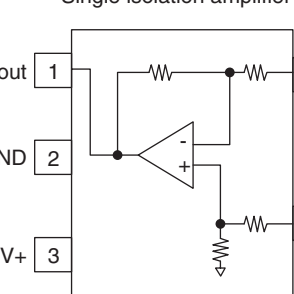


SXX	LOC	C	A
s420	C4202-C4208	US06229 220P(SL)	X
s421	C4201	US06310 100P(SL)	X
s422	R4205	RD35410 10K	X
s423	R4203	RD35433 33	X
s424	R4201	RD35547 47K	X
s425	JK451	VV26950 MD-SB130-90	X
s426	R4206	RD35510 10K	X
s427	ST451	X	WB3420
s431	CB494	X	X
s432	W4903	X	X
s433	IC491	X	X
s434	C4901	X	X
s435	ST492	X	X
s436	R4904	X	X
s447	W4301	X	X
s453	CB456	X	X
s456	ST491	WB3430	X
s457	TH492	W169830 W0394103J1	X
s458	D4901-D4903	V133900 1S3395	X
s459	R4902	RD35510 10K	X
s460	R4901	RD35710 10K	X
s461	CB491	V187810 51048	X
s462	W4901	MF80316	X

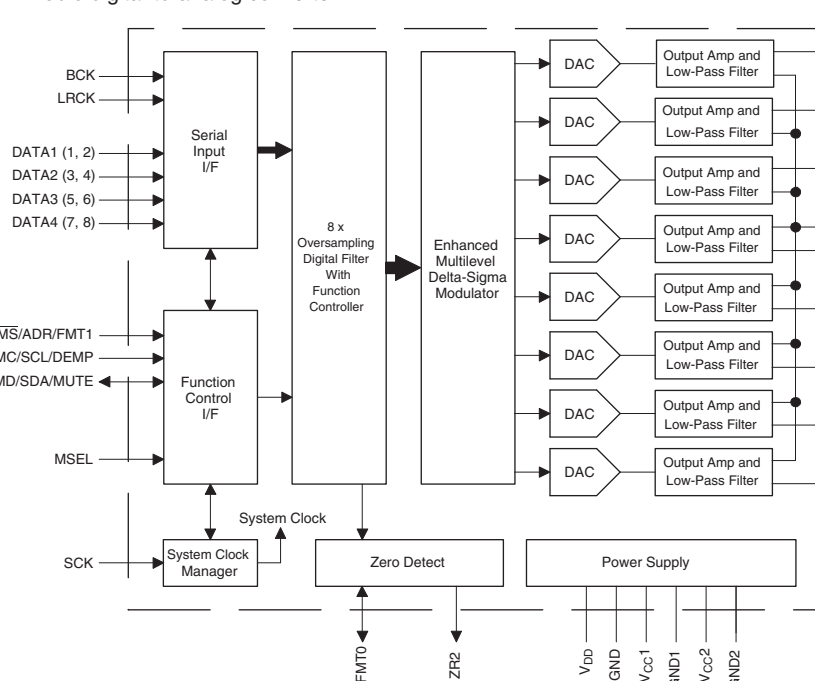
IC451-454: LM833MX  
Operational amplifier



IC455, 459: NJM2505A  
Single isolation amplifier

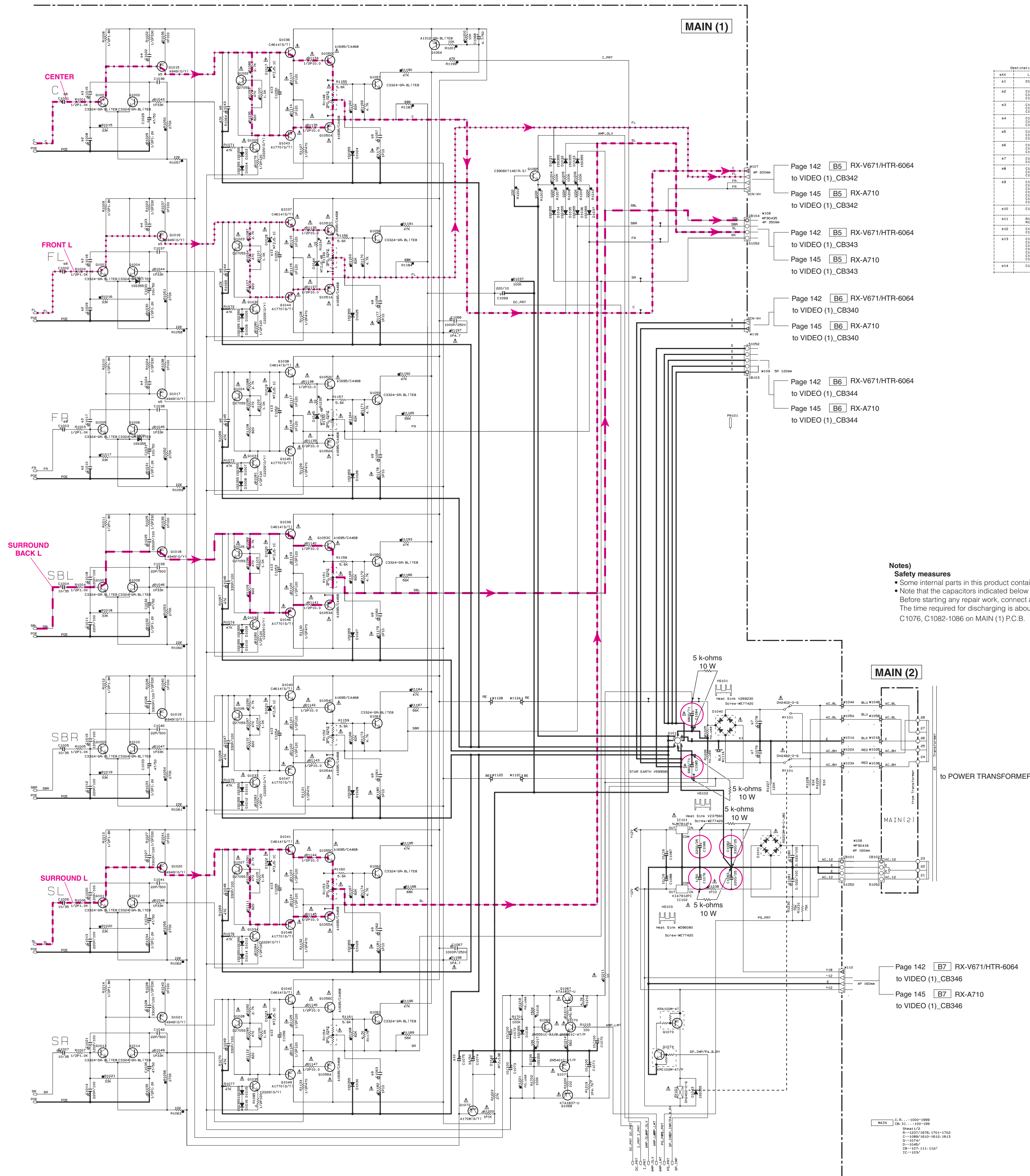


IC456: PCM1681PWPR  
Audio digital-to-analog converter



ZR1/ZR1/FMT0	<input type="checkbox"/>	<input type="checkbox"/>	1	○	28	<input type="checkbox"/>	<input type="checkbox"/>	ZR1
MS/ADR/FMT1	<input type="checkbox"/>	<input type="checkbox"/>	2		27	<input type="checkbox"/>	<input type="checkbox"/>	V <sub>DD</sub>
MC/SCU/DEMP	<input type="checkbox"/>	<input type="checkbox"/>	3		26	<input type="checkbox"/>	<input type="checkbox"/>	V <sub>DD</sub>
MD/SDA/MUTE	<input type="checkbox"/>	<input type="checkbox"/>	4		25	<input type="checkbox"/>	<input type="checkbox"/>	V <sub>DD</sub>
SCK	<input type="checkbox"/>	<input type="checkbox"/>	5		24	<input type="checkbox"/>	<input type="checkbox"/>	AG
DATA1	<input type="checkbox"/>	<input type="checkbox"/>	6		23	<input type="checkbox"/>	<input type="checkbox"/>	V <sub>DD</sub>
BACK	<input type="checkbox"/>	<input type="checkbox"/>	7		22	<input type="checkbox"/>	<input type="checkbox"/>	V <sub>DD</sub>
LRCK	<input type="checkbox"/>	<input type="checkbox"/>	8		21	<input type="checkbox"/>	<input type="checkbox"/>	V <sub>DD</sub>
V <sub>DD</sub>	<input type="checkbox"/>	<input type="checkbox"/>	9		20	<input type="checkbox"/>	<input type="checkbox"/>	V <sub>DD</sub>
DGND	<input type="checkbox"/>	<input type="checkbox"/>	10		19	<input type="checkbox"/>	<input type="checkbox"/>	V <sub>DD</sub>
DATA2	<input type="checkbox"/>	<input type="checkbox"/>	11		18	<input type="checkbox"/>	<input type="checkbox"/>	AG
DATA3	<input type="checkbox"/>	<input type="checkbox"/>	12		17	<input type="checkbox"/>	<input type="checkbox"/>	V <sub>DD</sub>
DATA4	<input type="checkbox"/>	<input type="checkbox"/>	13		16	<input type="checkbox"/>	<input type="checkbox"/>	V <sub>DD</sub>
MSFL	<input type="checkbox"/>	<input type="checkbox"/>	14		15	<input type="checkbox"/>	<input type="checkbox"/>	V <sub>DD</sub>





Destination Part List				
#	XXX	LOC	REF	
1	01	D040	ME1072	ME10110
			2200/150	2200/630
		C1008	MH1542	ME10099
		C1009	2200/150	2200/630
		C1010	2200/150	2200/630
		C1011	2200/150	1200/630
4	03	C1012	MH1546	ME10099
		C1014	2200/150	2200/630
		C1017	ME0765	22P/7630
		C1018	ME0765	22P/7630
15	03	C1020	MH1546	ME10099
		C1021	22P/7630	22P/7630
		C1044	MH1060A	ME10010
		C1045	1300/150	1300/630
18	03	C1078	MA1141	ME10010
		C1079	0.1/150	0.147/150
		C1080	10/75	ME10010
		C1081	10/75	10/760
110	03	C1062	ME11005	ME10050
		C1063	0.3/30/450	0.3/30/450
		C1064	10/760	10/760
		C1065	10/760	10/760
112	01	B075	MA1141	ME08702
		C1073	0.3/30	0.3/30
		C1068	ME10074	ME10074
		C1069	10/760	10/760
114	03	C1054	ME10075	ME10075
		C1055	10/760	10/760
		C1056	10/760	10/760
		C1057	10/760	10/760
116	04	C809	ME10074	ME10010
			47/60	100/60

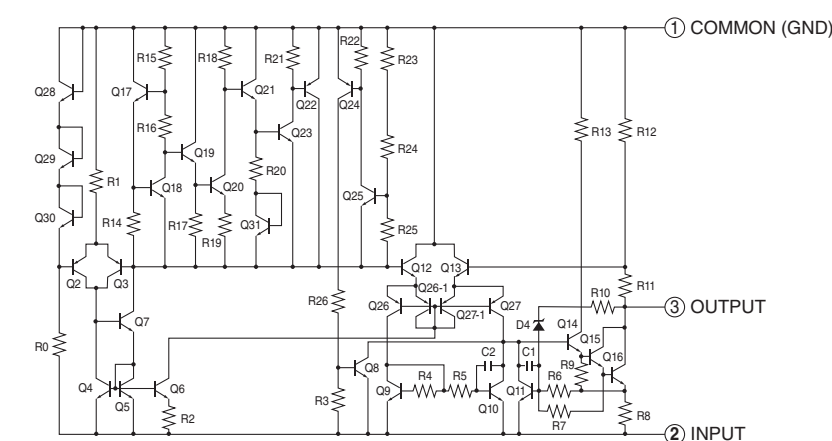
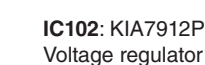
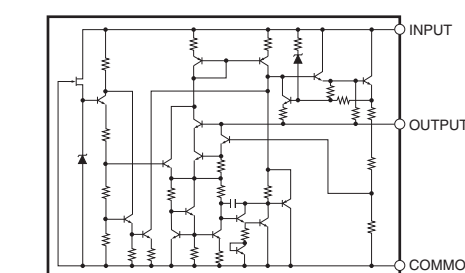
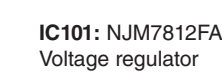
REMARKS		PARTS NAME
NO MARK		CARBON FILM RESISTOR (P=5)
		CARBON FILM RESISTOR (P=10)
		METAL OXIDE FILM RESISTOR
		METAL FILM RESISTOR
		METAL PLATE RESISTOR
		FIRE PROOF CARBON FILM RESISTOR
		CEMENT MOLDED RESISTOR
		SEMI VARIABLE RESISTOR
		CHIP RESISTOR

CAPACITOR	
REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
⊙	CERAMIC TUBULAR CAPACITOR
⊖	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
①	MICA CAPACITOR
Ⓟ	POLYPROPYLENE FILM CAPACITOR
⊕	SEMICONDUCTIVE CERAMIC CAPACITOR

```

NOTICE (mode1)
(J)..... JAPAN
(U)..... U. S. A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERICA
(S)..... BRAZIL
(H)..... THAI

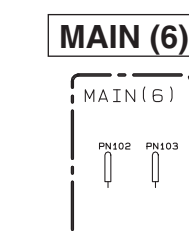
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### Notes

**Safety measure:**

- \* Some internal parts in this product contain high voltages and are dangerous. Be sure to take safety measures during servicing, such as wearing insulating gloves.  
 \* Note that the capacitors indicated below are dangerous even after the power is turned off because an electric charge remains and a high voltage continues to exist there.  
 Before starting any repair work, connect a discharging resistor (5 k-ohms/10 W) to the terminals of each capacitor indicated below to discharge electricity.  
 The time required for discharging is about 30 seconds per each.  
 C1076, C1082-1086 on MAIN (1) P.C.B.

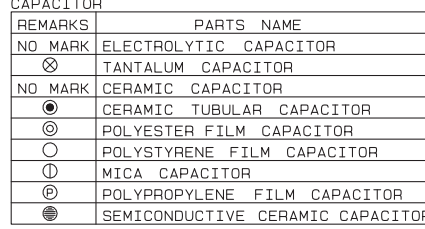


Page 142 [B7] RX-V671/HTR-606  
to VIDEO (1)\_CB346

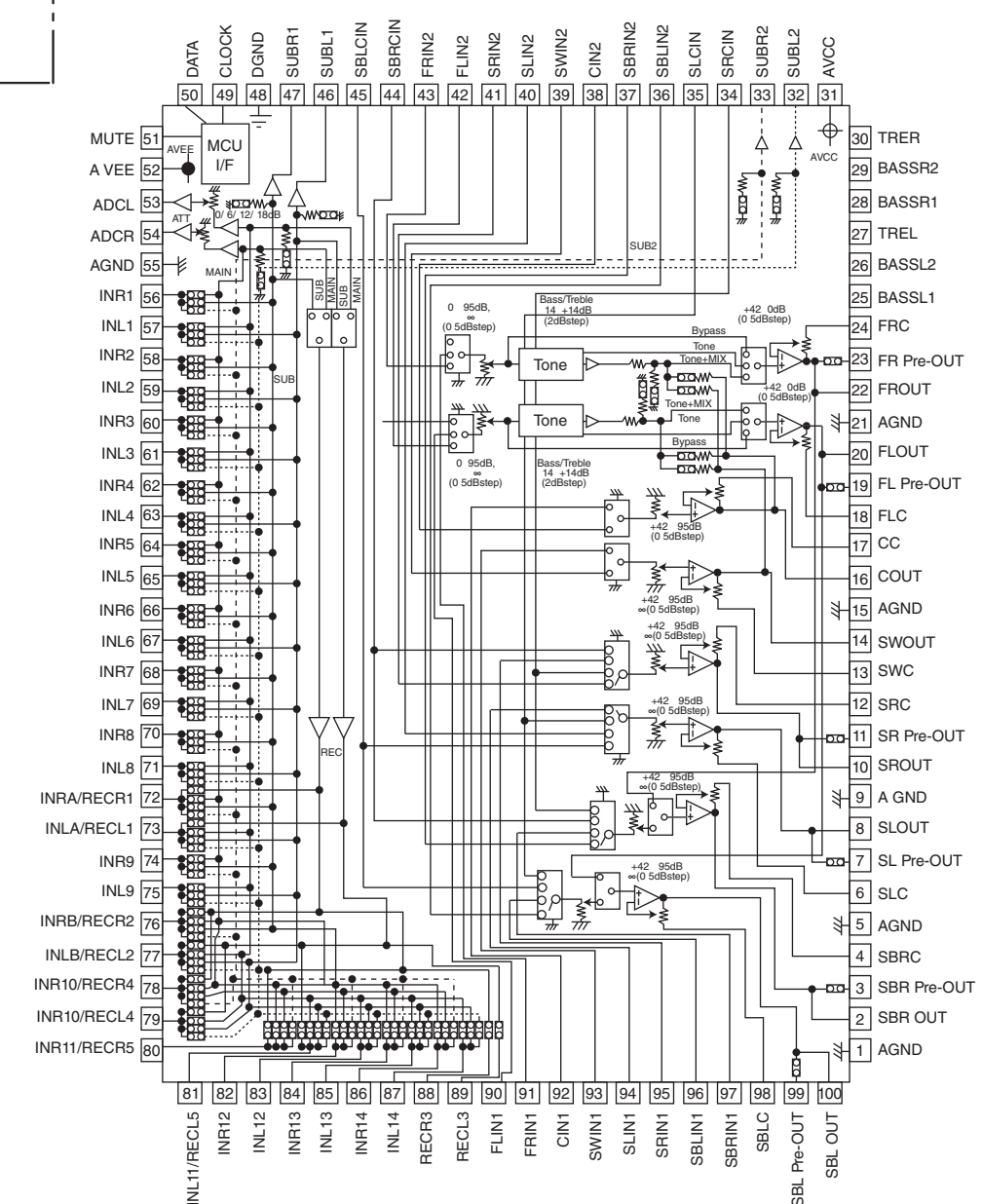
Page 145 [B7] RX-A710  
to VIDEO (1) CB346

- ★ All voltages are measured with a 10M $\Omega$ /V DC electronic voltmeter.
- ★ Components having special characteristics are marked  $\Delta$  and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.

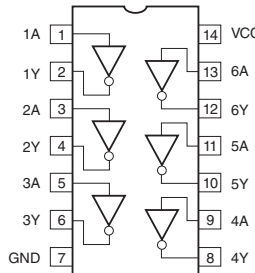




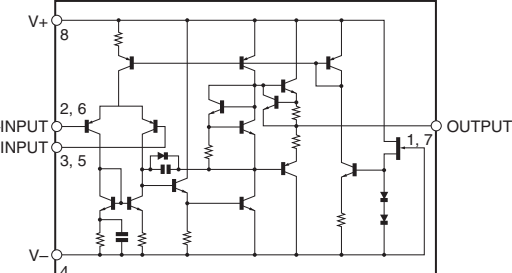
**IC153:** R2A15220FP  
8-channel electronic volume with 11 input selector and tone control



**IC152:** TC74VHCU04FT  
Hex inverters

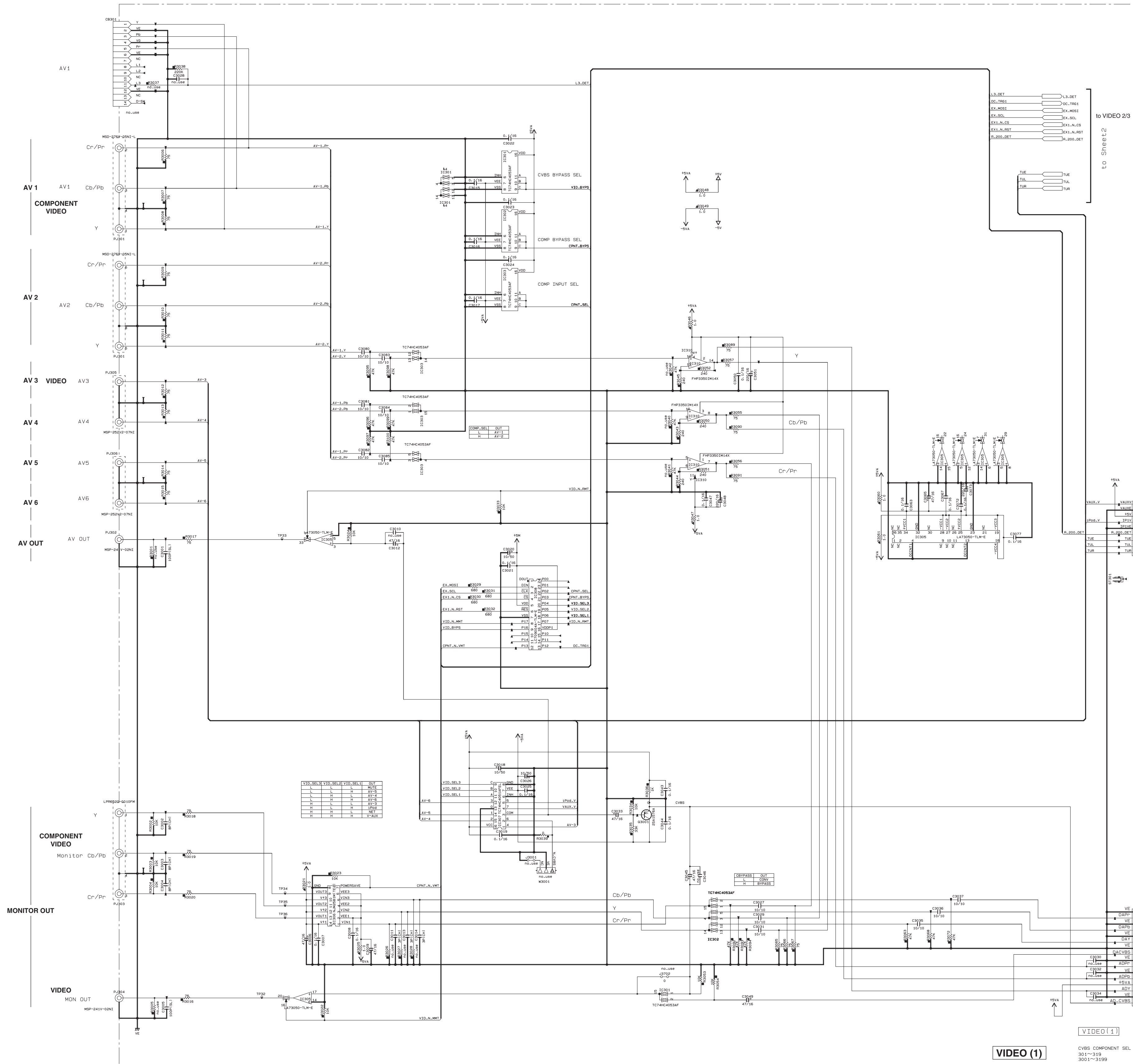


**IC154: NJM4565M (TE1)**  
Dual operational amplifier



- ★ All voltages are measured with a 10M $\Omega$ /V DC electronic voltmeter.
- ★ Components having special characteristics are marked  $\Delta$  and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.









**VIDEO 1/3**



```

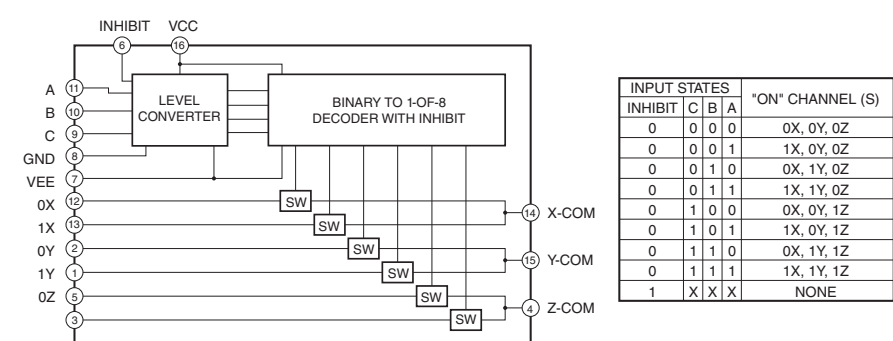
NOTICE (model)
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(U)..... U. S. A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROP
(V)..... TAIWAN
(F)..... RUSSIAN
(S)..... LATIN AMERI
(P)..... BRAZIL
(H)..... THAI

```

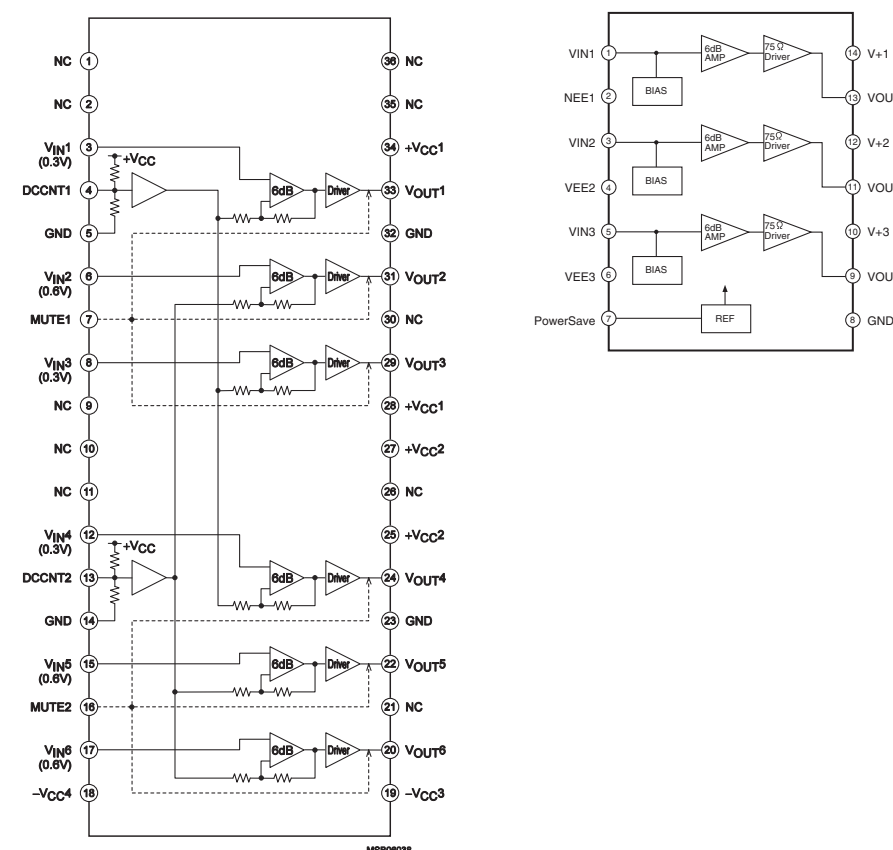
RESISTOR	
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
	CARBON FILM RESISTOR (P=10)
	METAL OXIDE FILM RESISTOR
	METAL FILM RESISTOR
	METAL PLATE RESISTOR
	FIRE PROOF CARBON FILM RESISTOR
	CEMENT MOLDED RESISTOR
	SEMI VARIABLE RESISTOR
	CHIP RESISTOR

CAPACITOR		PARTS NAME
NO MARK		ELECTROLYTIC CAPACITOR
⊗		TANTALUM CAPACITOR
NO MARK		CERAMIC CAPACITOR
⊙		CERAMIC TUBULAR CAPACITOR
⊗		POLYESTER FILM CAPACITOR
⊙		POLYSTYRENE FILM CAPACITOR
⊖		MICA CAPACITOR
⊙		POLYPROPYLENE FILM CAPACITOR
⊕		SEMICONDUCTIVE CERAMIC CAPACITOR

**IC301-303: TC74HC4053AF**  
Analog multiplexer/demultiplexer

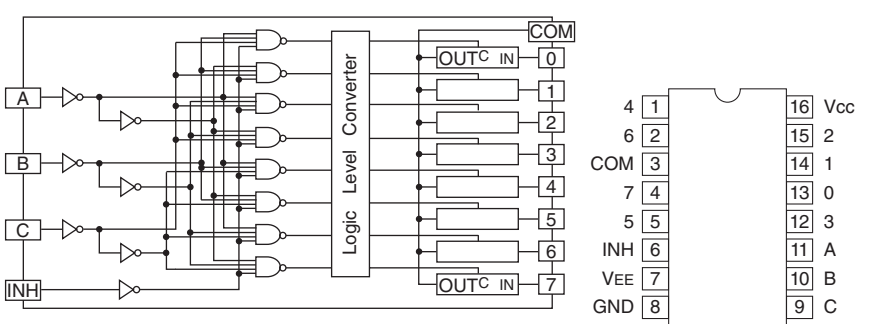


**IC305:** LA73050-TLM-E  
6-channel 75-ohm video driver

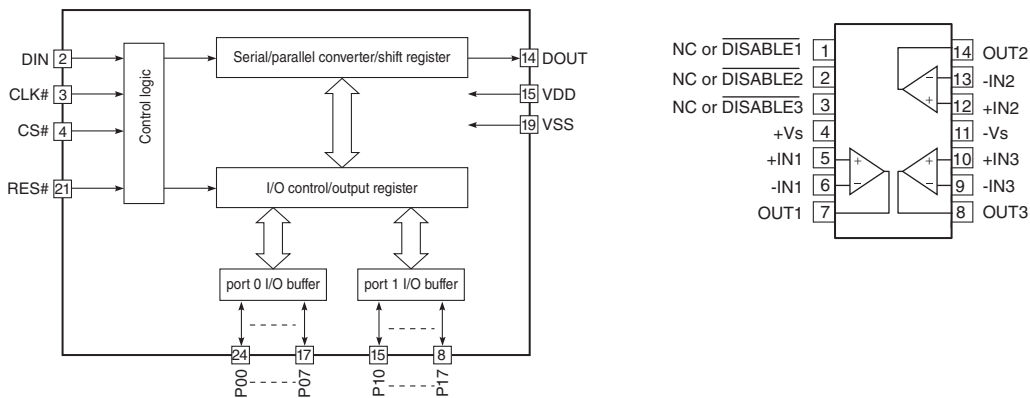


**IC306:** NJM2581M  
Video amplifier

**IC307: TC74HC4051AFEL**  
8-channel analog multiplexer/demultiplexer



**IC308:** LC709004A-TLM-E  
I/O-expander for microcontroller

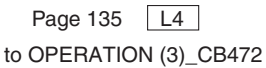


**IC310:** FHP3350IM14X  
Triple voltage feedback amplifier

- ★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
- ★ Components having special characteristics are marked  $\Delta$  and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.

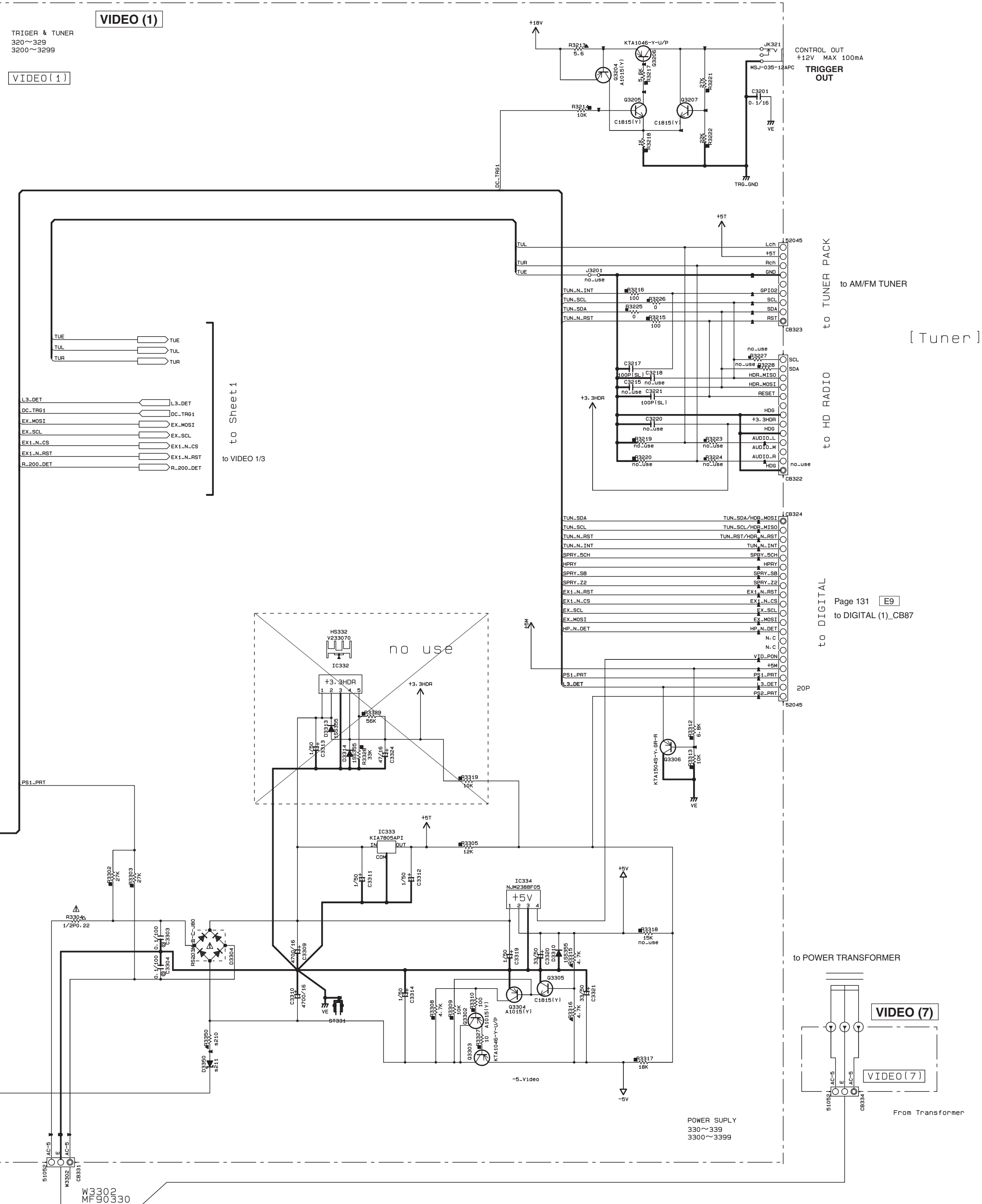
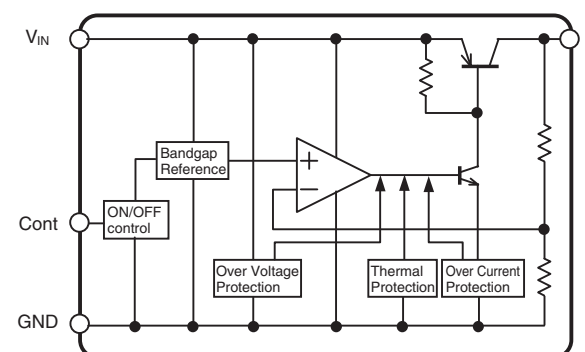
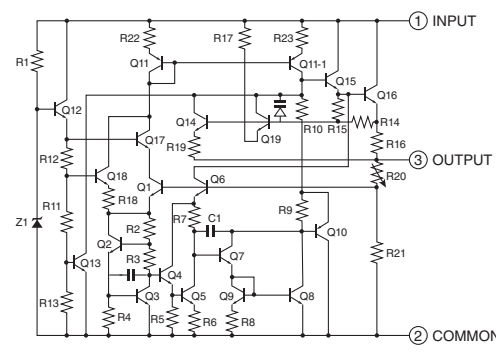
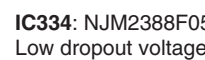
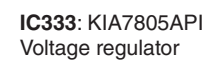










Destination Part List									
AXX	LOC	U	C	RS	T	A	BGF	L	
s201	TE341	WT-2077-01-76	WT-2077-01-76	WT-2077-01-76	WT-2077-01-76	WT-2077-01-76	WT-2077-01-76	WT-2077-01-76	WT-2077-01-76
	TE343	WT-2049-01-76	WT-2049-01-76	WT-2049-01-76	WT-2049-01-76	WT-2049-01-76	WT-2049-01-76	WT-2049-01-76	WT-2049-01-76
s202	TE342	WT-2077-01-76	WT-2077-01-76	WT-2077-01-76	WT-2077-01-76	WT-2077-01-76	WT-2077-01-76	WT-2077-01-76	WT-2077-01-76
	TE343	WT-2049-01-76	WT-2049-01-76	WT-2049-01-76	WT-2049-01-76	WT-2049-01-76	WT-2049-01-76	WT-2049-01-76	WT-2049-01-76
s210	R3350	X	X	WT-2077-01-76	X	X	X	X	X
s211	D3350	X	X	WT-2077-01-76	X	X	X	X	X
				WT-2077-01-76	X	X	X	X	X

Page 139 H2  
to MAIN (1)\_W107Page 139 H3  
to MAIN (1) CB104

Page 139 H4  
to MAIN (1)\_W116

Page 139 H4  
to MAIN (1)\_CB103

Page 139 H9  
to MAIN (1) W110

RESISTOR	
REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
	CARBON FILM RESISTOR (P=10)
	METAL OXIDE FILM RESISTOR
	METAL FILM RESISTOR
	METAL PLATE RESISTOR
	FIRE PROOF CARBON FILM RESISTOR
	CEMENT MOLDED RESISTOR
	SEMI VARIABLE RESISTOR
	CHIP RESISTOR

CAPACITOR	
REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
⊗	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
⊙	CERAMIC TUBULAR CAPACITOR
⊗	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
①	MICA CAPACITOR
⊗	POLYPROPYLENE FILM CAPACITOR
⊙	SEMICONDUCTIVE CERAMIC CAPACITOR

```

NOTICE (model)
(J)..... JAPAN
(U)..... U.S.A
(C)..... CANADA
(R)..... GENERAL
(T)..... CHINA
(K)..... KOREA
(A)..... AUSTRALIA
(B)..... BRITISH
(G)..... EUROPE
(L)..... SINGAPORE
(E)..... SOUTH EUROPE
(V)..... TAIWAN
(F)..... RUSSIAN
(P)..... LATIN AMERIC
(S)..... BRAZIL
(H)..... THAI

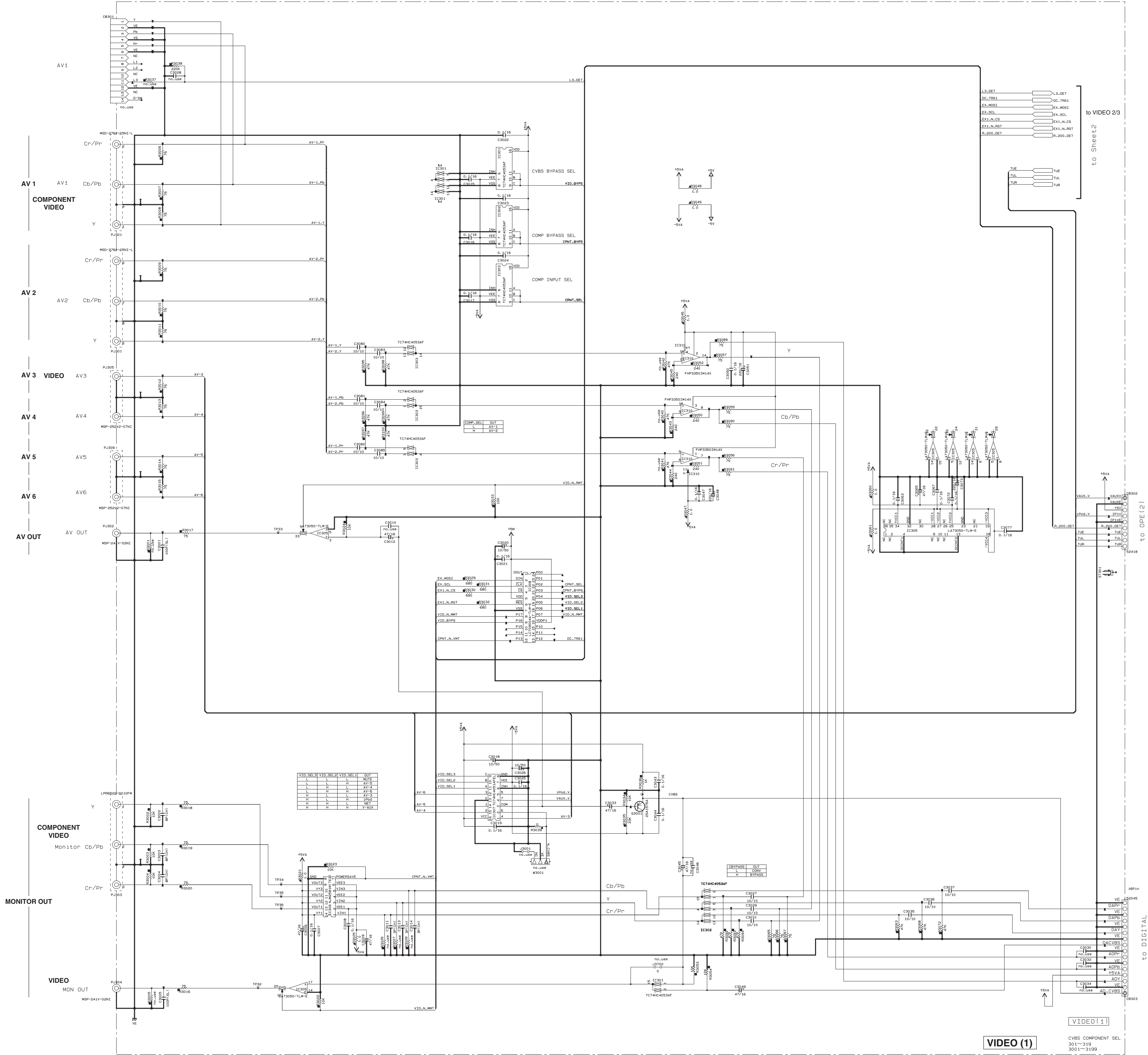
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- ★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.
- ★ Components having special characteristics are marked  $\Delta$  and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.





VIDEO 1/3

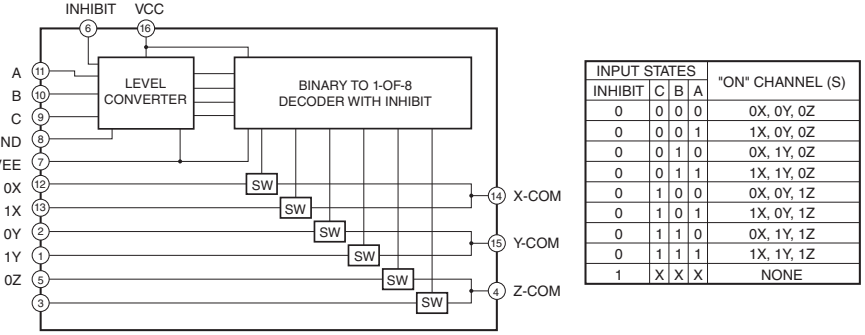


NOTICE (model)  
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(U)..... U.S.A  
(C)..... CANADA  
(R)..... GENERAL  
(T)..... CHINA  
(K)..... KOREA  
(A)..... AUSTRALIA  
(B)..... BRITISH  
(G)..... EUROPE  
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(V)..... TAIWAN  
(F)..... RUSSIAN  
(P)..... LATIN AMERICA  
(H)..... THAI

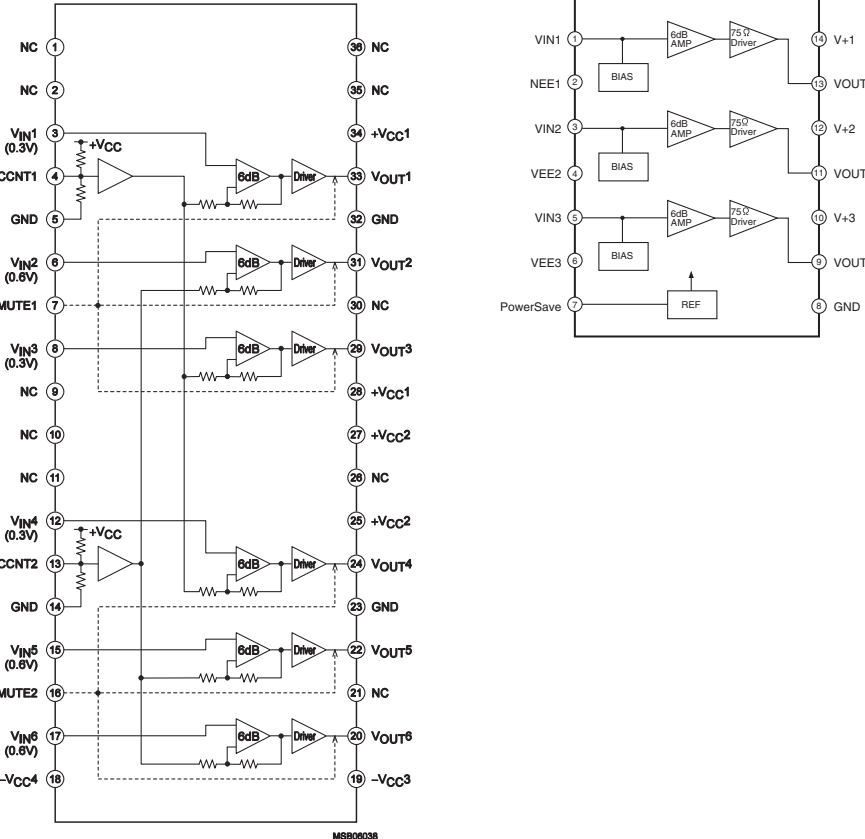
REMARKS	PARTS NAME
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□	CARBON FILM RESISTOR (P=10)
△	METAL OXIDE FILM RESISTOR
▲	METAL FILM RESISTOR
■	METAL PLATE RESISTOR
▣	FIRE PROOF CARBON FILM RESISTOR
▤	CEMENT MOLDED RESISTOR
▥	SEMI VARIABLE RESISTOR
■	CHIP RESISTOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
□	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
●	CERAMIC TUBULAR CAPACITOR
○	POLYESTER FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
○	MICA CAPACITOR
○	POLYPROPYLENE FILM CAPACITOR
●	SEMICONDUCTIVE CERAMIC CAPACITOR

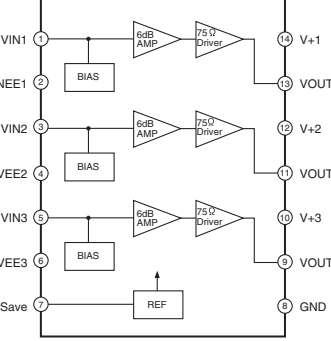
IC301-303: TC74HC4053AF  
Analog multiplexer/demultiplexer



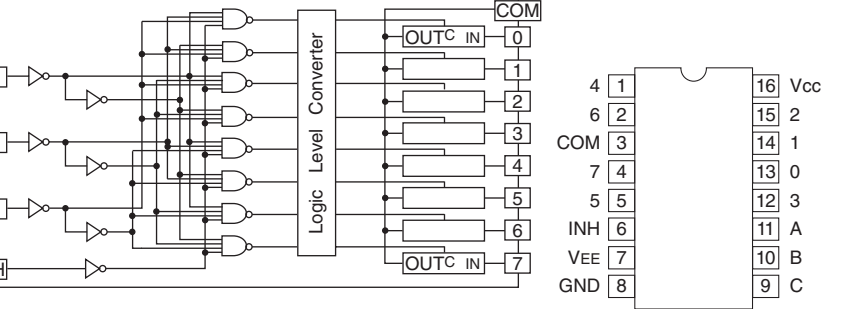
IC305: LA73050-TLM-E  
6-channel 75-ohm video driver



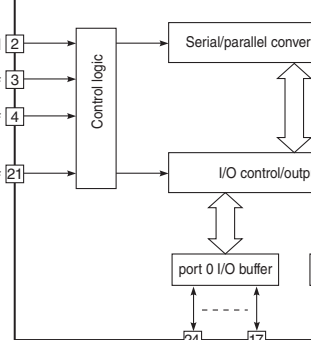
IC306: NJM2581M  
Video amplifier



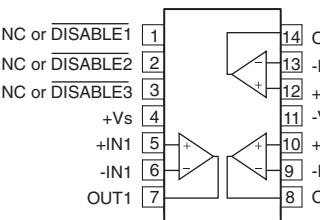
IC307: TC74HC4051AFEL  
8-channel analog multiplexer/demultiplexer



IC308: LC709004A-TLM-E  
I/O-expander for microcontroller



IC310: FHP3350IM14X  
Triple voltage feedback amplifier



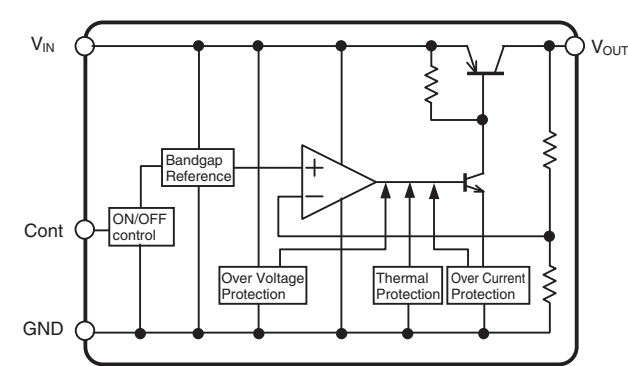
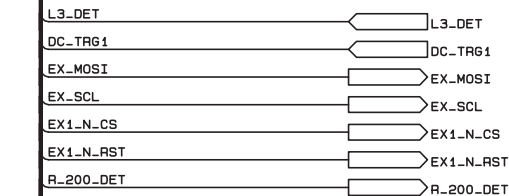
Page 138 [I10]  
to OPERATION (2)\_CB455

Page 128 [B1]  
to DIGITAL (1)\_CB21

VIDEO (1)

CVBS COMPONENT SEL  
301~319  
3001~3199

★ All voltages are measured with a 10MΩ/V DC electronic voltmeter.  
★ Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.  
★ Schematic diagram is subject to change without notice.



CAPACITOR		PARTS NAME
REMARKS		
NO MARK	ELECTROLYTIC CAPACITOR	
⊗	TANTALUM CAPACITOR	
NO MARK	CERAMIC CAPACITOR	
⊙	CERAMIC TUBULAR CAPACITOR	
⊙	POLYESTER FILM CAPACITOR	
○	POLYSTYRENE FILM CAPACITOR	
⊙	MICA CAPACITOR	
⊙	POLYPROPYLENE FILM CAPACITOR	
⊙	SEMI CONDUCTIVE CERAMIC CAPACITOR	

- ★ All voltages are measured with a 10M $\Omega$ /V DC electronic voltmeter.
- ★ Components having special characteristics are marked  $\Delta$  and must be replaced with parts having specifications equal to those originally installed.
- ★ Schematic diagram is subject to change without notice.



VIDEO 3/3

RX-A710

Page 131  
to DIGITAL (1)\_CB82

VIDEO (4)

REMOTE I/O  
VIDEO (4)

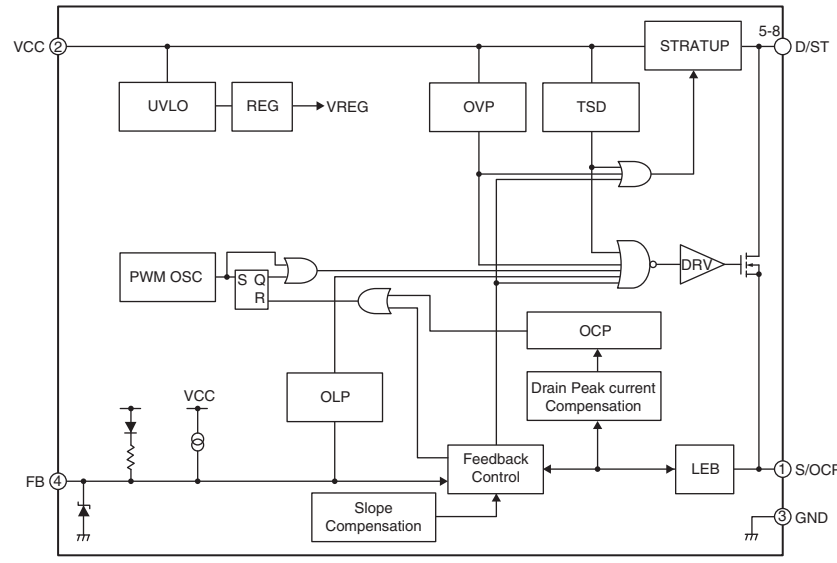
REMOTE

VOLTAGE SELECTOR  
R ONLY

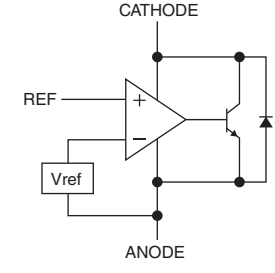
VIDEO (8)  
381~390  
3801~3900

VIDEO (9)

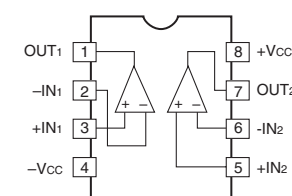
IC371: STR2A153  
Switching regulator



IC373: TL431ACLPR  
Adjustable precision shunt regulators



IC381: NJM2068MD-TE2  
Dual operational amplifier



SXX	LOC	U	C	A
s304	F3702	WG21110	BA125V	WM93310
s306	C3721	W325100	W325100	W325100
s315	C3712	0.047/400	0.047/400	0.022/630
s315	C3706	WM76500	WM76500	WM82250
s321	R3726	RD35612	2.7K	RD35612
s428	R3801	X	X	WM96470
s428	R3802	X	X	WM96470
s429	D3802	X	X	VV65930
s430	C3801	X	X	UR23747
s431	C3803	X	X	WM50370
s432	C3804	X	X	WM50370
s432	R3810	X	X	WM50370
s433	C3805	X	X	UR23747
s434	R3807	X	X	WM50370
s435	R3808	X	X	WM50370
s436	R3809	X	X	WM50370
s437	IC381	X	X	WM50370
s438	R3812	X	X	WM50370
s439	C3810	X	X	WM50370
s440	C3812	X	X	WM50370
s441	R3813	X	X	WM50370
s442	C3813	X	X	WM50370
s443	R3817	X	X	WM50370
s444	R3819	X	X	WM50370
s445	C3817	X	X	WM50370
s446	PJ381	X	X	WM50370
s451	R3803	X	X	WM50370
s452	CB383	X	X	WM50370

NOTICE (model1)  
(J)..... JAPAN  
(U)..... U.S.A  
(C)..... CANADA  
(R)..... GENERAL  
(T)..... CHINA  
(K)..... KOREA  
(A)..... AUSTRALIA  
(B)..... BRITISH  
(G)..... EUROPE  
(L)..... SINGAPORE  
(E)..... SOUTH EUROPE  
(V)..... TAIWAN  
(F)..... RUSSIAN  
(P)..... LATIN AMERICA  
(S)..... BRAZIL  
(H)..... THAI

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR (P=5)
NO MARK	CARBON FILM RESISTOR (P=10)
NO MARK	METAL OXIDE FILM RESISTOR
NO MARK	METAL FILM RESISTOR
NO MARK	METAL PLATE RESISTOR
NO MARK	FIRE PROOF CARBON FILM RESISTOR
NO MARK	CEMENT MOLDED RESISTOR
NO MARK	SEMI VARIABLE RESISTOR
NO MARK	CHIP RESISTOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
NO MARK	TANTALUM CAPACITOR
NO MARK	CERAMIC CAPACITOR
NO MARK	CERAMIC TUBULAR CAPACITOR
NO MARK	POLYESTER FILM CAPACITOR
NO MARK	POLYSTYRENE FILM CAPACITOR
NO MARK	MICA CAPACITOR
NO MARK	POLYPROPYLENE FILM CAPACITOR
NO MARK	SEMICONDUCTIVE CERAMIC CAPACITOR

Notes

Safety measures

- Some internal parts in this product contain high voltages and are dangerous. Be sure to take safety measures during servicing, such as wearing insulating gloves.
- Note that the capacitors indicated below are dangerous even after the power is turned off because an electric charge remains and a high voltage continues to exist there. Before starting any repair work, connect a discharging resistor (5 k-ohms/10 W) to the terminals of each capacitor indicated below to discharge electricity. The time required for discharging is about 30 seconds per each.
- C3706 on VIDEO (2) P.C.B.

AC-DC CONVERTER  
370~379  
3700~3799

VIDEO (2)

VIDEO (3)

VIDEO (3)

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to DIGITAL (1)\_CB947

- All voltages are measured with a 10MΩ/V DC electronic voltmeter.
- Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
- Schematic diagram is subject to change without notice.

## ■ REPLACEMENT PARTS LIST

### ● ELECTRICAL COMPONENT PARTS

#### WARNING

- Components having special characteristics are marked  $\Delta$  and must be replaced with parts having specifications equal to those originally installed.

#### ABBREVIATIONS IN THIS LIST ARE AS FOLLOWS:

C.A.EL.CHP	: CHIP ALUMI.ELECTROLYTIC CAP	L.DTCT	: LIGHT DETECTING MODULE
C.CE	: CERAMIC CAP	LED.CHP	: CHIP LED
C.CE.ARRAY	: CERAMIC CAP ARRAY	LED.DSPLY	: LED DISPLAY
C.CE.CHP	: CHIP CERAMIC CAP	LED.INFRD	: LED,INFRARED
C.CE.M.CHP	: CHIP MULTILAYER CERAMIC CAP	PHOT.CPL	: PHOTO COUPLER
C.CE.SAFTY	: RECOGNIZED CERAMIC CAP	PHOT.INTR	: PHOTO INTERRUPTER
C.CE.TUBLR	: CERAMIC TUBULAR CAP	PHOT.RFLCT	: PHOTO REFLECTOR
C.CE.SMI	: SEMI CONDUCTIVE CERAMIC CAP	PHOT.TR	: PHOTO TRANSISTOR
C.EL	: ELECTROLYTIC CAP	PIN.TEST	: PIN,TEST POINT
C.EL.BP	: BIPOLAR ELECTROLYTIC CAP	PTC.THERMISTOR	: POSITIVE TEMPERATURE COEFFICIENT THERMISTOR
C.EL.CHP	: CHIP ELECTROLYTIC CAP	R.ARRAY	: RESISTOR ARRAY
C.MICA	: MICA CAP	R.CAR.	: CARBON RESISTOR
C.ML.FLM	: MULTILAYER FILM CAP	R.CAR.CHP	: CHIP RESISTOR
C.MP	: METALLIZED POLYESTER FILM CAP	R.CAR.FP	: FLAME PROOF CARBON RESISTOR
C.MYLAR	: MYLAR FILM CAP	R.CEMENT	: CEMENT RESISTOR
C.MYLAR.ML	: MULTILAYER MYLAR FILM CAP	R.FUS	: FUSIBLE RESISTOR
C.NIOB.OXD	: NIOBIUM OXIDE CAP	R.MTL.CHP	: CHIP METAL FILM RESISTOR
C.PAPER	: PAPER CAPACITOR	R.MTL.FLM	: METAL FILM RESISTOR
C.PLS	: POLYSTYRENE FILM CAP	R.MTL.OXD	: METAL OXIDE FILM RESISTOR
C.POL	: POLYESTER FILM CAP	R.MTL.PLAT	: METAL PLATE RESISTOR
C.PP	: POLYPROPYLENE FILM CAP	RSNR.CE	: CERAMIC RESONATOR
C.PP.CHP	: CHIP POLYPROPYLENE FILM CAP	RSNR.CRYS	: CRYSTAL RESONATOR
C.TNTL	: TANTALIUM CAP	SCR.BND.HD	: BIND HEAD B-TIGHT SCREW
C.TNTL.CHP	: CHIP TANTALIUM CAP	SCR.TERM	: SCREW TERMINAL
C.TRIM	: TRIMMER CAP	SCR.TR	: SCREW,TRANSISTOR
CN	: CONNECTOR	SURG.PRTCT	: SURGE PROTECTOR
CN.BS.PIN	: CONNECTOR,BASE PIN	SUPRT.PCB	: P.C.B. SUPPORT
CN.CANNON	: CONNECTOR,CANNON	SW.LEVER	: LEVER SWITCH
CN.DIN	: CONNECTOR,DIN	SW.MICRO	: MICRO SWITCH
CN.FLAT	: CONNECTOR,FLAT CABLE	SW.LEAF	: LEAF SWITCH
CN.FFC	: CONNECTOR,FLEXIBLE FLAT CABLE	SW.PUSH	: PUSH SWITCH
CN.HDMI	: HDMI CONNECTOR	SW.RT	: ROTARY SWITCH
CN.PHOTO.R	: PHOTO FIBER SENSOR,RECEIVED	SW.RT.ENC	: ROTARY ENCODER
CN.PHOTO.T	: PHOTO FIBER SENSOR,TRANSMITTED	SW.RT.MTR	: ROTARY SWITCH WITH MOTOR
DIODE.ARRAY	: DIODE ARRAY	SW.SLIDE	: SLIDE SWITCH
DIODE.BRG	: DIODE BRIDGE	SW.TACT	: TACT SWITCH
DIODE.CHP	: CHIP DIODE	TERM.SP	: SPEAKER TERMINAL
DIODE.VAR	: VARACTOR DIODE	TERM.WRAP	: WRAPPING TERMINAL
DIODE.ZENR	: ZENER DIODE	THRMST.CHP	: CHIP THERMISTOR
DIODE.Z.CHP	: CHIP ZENER DIODE	TR	: TRANSISTOR
DIODE.SCHOTTKY	: SCHOTTKY BARRIER DIODE	TR.CHP	: CHIP TRANSISTOR
DIODE.PHOT	: PHOTO DIODE	TR.DGT	: DIGITAL TRANSISTOR
FER.BEAD	: FERRITE BEADS	TR.DGT.CHP	: CHIP DIGITAL TRANSISTOR
FER.CORE	: FERRITE CORE	TR.PAIR	: PAIR TRANSISTOR
FET.CHP	: CHIP FET	TRANS	: TRANSFORMER
FL.DSPLY	: FLUORESCENT DISPLAY	TRANS.PULS	: PULSE TRANSFORMER
FLTR.CE	: CERAMIC FILTER	TRANS.PWR	: POWER TRANSFORMER
FLTR.COMB	: COMB FILTER MODULE	VARIATOR.CHP	: CHIP VARIATOR
FLTR.LC.RF	: LC FILTER,EMI	VOLT.SELCT	: VOLTAGE SELECTOR
FUSE.CHP	: CHIP FUSE	VR	: ROTARY POTENTIOMETER
GND.MTL	: GROUND PLATE	VR.MTR	: POTENTIOMETER WITH MOTOR
GND.TERM	: GROUND TERMINAL	VR.SLIDE	: SLIDE POTENTIOMETER
JUMPER.CN	: JUMPER CONNECTOR	VR.SW	: POTENTIOMETER WITH SWITCH
JUMPER.TST	: JUMPER,TEST POINT	VR.TRIM	: TRIMMER POTENTIOMETER



## DIGITAL

Ref No.	Part No.	Description	Markets
* WY331100	P. C. B.	DIGITAL	U
* WY331200	P. C. B.	DIGITAL	CRTALS
* WY331300	P. C. B.	DIGITAL	BGF
CB1-5	WW271700	CN. HDMI	19P HDMI
CB10	WD295600	CN. BS. PIN	20P SE
CB21	VQ044700	CN. BS. PIN	16P
CB23	VQ044100	CN. BS. PIN	5P
CB31	WW271700	CN. HDMI	19P HDMI
CB32	VY939800	CN. BS. PIN	20P TE
CB61	WW271700	CN. HDMI	19P HDMI
CB81	VN520900	CN. BS. PIN	52045 26P TE
CB82	VB389800	CN. BS. PIN	2P
CB83	VK024700	CN. BS. PIN	3P
CB85	VK025600	CN. BS. PIN	12P
CB87	VU282000	CN.	20P
CB90	VQ047200	CN. BS. PIN	9P
CB92	VG518300	PIN. BASE	2P RF TE
* CB901	WY212400	CN. LAN	8P RJSE1AG3870-R
CB902	VB390100	CN. BS. PIN	5P
CB943-945	V9356900	CN. JE	19P SE
CB947	LB919040	CN. BS. PIN	4P
CB948	VK026500	CN. BS. PIN	6P
CB949	VB389900	CN. BS. PIN	3P
CB951	LB919020	CN. BS. PIN	2P
C1	US634100	C. CE. CHP	0.01uF 16V
C2	US625100	C. CE. CHP	0.100uF 10V
C3-12	WG888300	C. CE. M. CHP	10uF 6.3V
C13-19	US625100	C. CE. CHP	0.100uF 10V
C20	US662470	C. CE. CHP	470pF 50V
C22-33	US625100	C. CE. CHP	0.100uF 10V
C34	US663100	C. CE. CHP	1000pF 50V
C35-42	US625100	C. CE. CHP	0.100uF 10V
C43	WD758300	C. CE. CHP	10uF 10V
C44-56	US625100	C. CE. CHP	0.100uF 10V
C57-92	US634100	C. CE. CHP	0.01uF 16V
* C93-94	US660700	C. CE. CHP	7pF 50V
C99	US663100	C. CE. CHP	1000pF 50V
C101	WD758300	C. CE. CHP	10uF 10V
C103-105	US663100	C. CE. CHP	1000pF 50V
C106	US662470	C. CE. CHP	470pF 50V
C107-108	WG888300	C. CE. M. CHP	10uF 6.3V
C109-110	WD758300	C. CE. CHP	10uF 10V
C111-112	WG251600	C. CE. CHP	4.7uF 6.3V
C113	US634100	C. CE. CHP	0.01uF 16V
C114-115	US663100	C. CE. CHP	1000pF 50V
C202-205	WD758300	C. CE. CHP	10uF 10V
C207-208	WJ932500	C. CE. CHP	1uF 6.3V
C210-234	US625100	C. CE. CHP	0.100uF 10V
C243-255	US634100	C. CE. CHP	0.01uF 16V
C264-265	WG888300	C. CE. M. CHP	10uF 6.3V
C267-268	WG888300	C. CE. M. CHP	10uF 6.3V
C269	US034820	C. CE. CHP	0.082uF 16V K
C270	WG251600	C. CE. CHP	4.7uF 6.3V
C271	WD758300	C. CE. CHP	10uF 10V
C272	US662470	C. CE. CHP	470pF 50V
C273	US663100	C. CE. CHP	1000pF 50V
C274	US662470	C. CE. CHP	470pF 50V

\* New Parts

Ref No.	Part No.	Description	Markets
* C275	US660800	C. CE. CHP	8pF 50V
C276	US661100	C. CE. CHP	10pF 50V D
C351	US662220	C. CE. CHP	220pF 50V
C352-353	US663100	C. CE. CHP	1000pF 50V
C354	US625100	C. CE. CHP	0.100uF 10V
C355	US634100	C. CE. CHP	0.01uF 16V
C356	WG888300	C. CE. M. CHP	10uF 6.3V
C357	US625100	C. CE. CHP	0.100uF 10V
C358-363	US634100	C. CE. CHP	0.01uF 16V
C364	US625100	C. CE. CHP	0.100uF 10V
C365	WG888300	C. CE. M. CHP	10uF 6.3V
C371	US625100	C. CE. CHP	0.100uF 10V
C373	US662220	C. CE. CHP	220pF 50V
C374	US662470	C. CE. CHP	470pF 50V
C376	US663100	C. CE. CHP	1000pF 50V
C377	WQ614300	C. CE. CHP	22uF 10VE
C378-379	US625100	C. CE. CHP	0.100uF 10V
C380	US634100	C. CE. CHP	0.01uF 16V
C381	WG888300	C. CE. M. CHP	10uF 6.3V
C501-503	WG888300	C. CE. M. CHP	10uF 6.3V
C505	WG888300	C. CE. M. CHP	10uF 6.3V
C507-509	WG888300	C. CE. M. CHP	10uF 6.3V
C510-511	US663100	C. CE. CHP	1000pF 50V
C514-547	US625100	C. CE. CHP	0.100uF 10V
C601-602	US046100	C. CE. CHP	1uF 25V
C605	US661220	C. CE. CHP	22pF 50V
C606	US625100	C. CE. CHP	0.100uF 10V
C607	US046100	C. CE. CHP	1uF 25V
C608-609	WD758300	C. CE. CHP	10uF 10V
C612-617	WG888300	C. CE. M. CHP	10uF 6.3V
C625-638	US634100	C. CE. CHP	0.01uF 16V
C652-660	US625100	C. CE. CHP	0.100uF 10V
C673-674	US625100	C. CE. CHP	0.100uF 10V
C675	US662470	C. CE. CHP	470pF 50V
C677	US663100	C. CE. CHP	1000pF 50V
C678	US634100	C. CE. CHP	0.01uF 16V
C801	UF017470	C. EL. CHP	47uF 6.3V
C802	UF027330	C. EL. CHP	33uF 10V
C803	US625100	C. CE. CHP	0.100uF 10V
C805-806	US625100	C. CE. CHP	0.100uF 10V
C808-814	US625100	C. CE. CHP	0.100uF 10V
C815	US046100	C. CE. CHP	1uF 25V
C816-822	US625100	C. CE. CHP	0.100uF 10V
C832	US663100	C. CE. CHP	1000pF 50V
C833-834	US662100	C. CE. CHP	100pF 50V
C835-839	US663100	C. CE. CHP	1000pF 50V
C840-841	US625100	C. CE. CHP	0.100uF 10V
C845-851	US046100	C. CE. CHP	1uF 25V
C852	US625100	C. CE. CHP	0.100uF 10V
C853-854	WG251600	C. CE. CHP	4.7uF 6.3V
C855	US625100	C. CE. CHP	0.100uF 10V
C856-857	US046100	C. CE. CHP	1uF 25V
C859-860	US046100	C. CE. CHP	1uF 25V
C861-862	US662100	C. CE. CHP	100pF 50V
C863	WG251600	C. CE. CHP	4.7uF 6.3V
C864-871	US663100	C. CE. CHP	1000pF 50V
C9001-9002	WG888300	C. CE. M. CHP	10uF 6.3V

\* New Parts

RX-V671/HTR-6064

RX-A710

## DIGITAL

Ref No.	Part No.	Description	Markets
C9003-9006	WG251600	C. CE. CHP 4. 7uF 6. 3V	
C9008	US663100	C. CE. CHP 1000pF 50V	
C9009	US634100	C. CE. CHP 0. 01uF 16V	
C9010	WC890600	C. EL 330uF 6. 3V	
C9011	US663100	C. CE. CHP 1000pF 50V	
C9012-9013	US661100	C. CE. CHP 10pF 50V D	
C9015-9017	WJ932500	C. CE. CHP 1uF 6. 3V	
C9019-9021	WJ932500	C. CE. CHP 1uF 6. 3V	
C9022-9026	WG888300	C. CE. M. CHP 10uF 6. 3V	
C9027	WG251600	C. CE. CHP 4. 7uF 6. 3V	
C9030-9032	WG888300	C. CE. M. CHP 10uF 6. 3V	
C9033-9047	US634100	C. CE. CHP 0. 01uF 16V	
C9048-9050	US625100	C. CE. CHP 0. 100uF 10V	
C9051-9052	US663100	C. CE. CHP 1000pF 50V	
C9053	WJ932500	C. CE. CHP 1uF 6. 3V	
C9054-9068	US625100	C. CE. CHP 0. 100uF 10V	
C9070	US625100	C. CE. CHP 0. 100uF 10V	
C9072	US625100	C. CE. CHP 0. 100uF 10V	
C9073	US663100	C. CE. CHP 1000pF 50V	
C9074	WJ932500	C. CE. CHP 1uF 6. 3V	
C9075	US663100	C. CE. CHP 1000pF 50V	
C9083-9084	US662100	C. CE. CHP 100pF 50V	
C9087-9089	US625100	C. CE. CHP 0. 100uF 10V	
C9090-9091	US046100	C. CE. CHP 1uF 25V	
C9201-9207	WG888300	C. CE. M. CHP 10uF 6. 3V	
* C9210	US643470	C. CE. CHP 4700pF 25V	
C9211	US625100	C. CE. CHP 0. 100uF 10V	
C9212	UF037100	C. EL. CHP 10uF 16V	
C9213-9251	US625100	C. CE. CHP 0. 100uF 10V	
C9252-9253	UF037100	C. EL. CHP 10uF 16V	
* C9254-9255	US643470	C. CE. CHP 4700pF 25V	
C9262-9264	US625100	C. CE. CHP 0. 100uF 10V	
C9266	US634100	C. CE. CHP 0. 01uF 16V	
* C9269-9270	WB571200	C. MYLA. CHP 0. 00082uF 16V	
C9271	US662470	C. CE. CHP 470pF 50V	
C9272	WG888300	C. CE. M. CHP 10uF 6. 3V	
* C9273-9274	US661150	C. CE. CHP 15pF 50V	
C9275	WG888300	C. CE. M. CHP 10uF 6. 3V	
C9276	UB214680	C. CE. CHP 0. 068uF 25V	
* C9278	US643470	C. CE. CHP 4700pF 25V	
C9279-9280	US625100	C. CE. CHP 0. 100uF 10V	
C9283	US625100	C. CE. CHP 0. 100uF 10V	
C9284-9285	WG888300	C. CE. M. CHP 10uF 6. 3V	
C9286-9289	US046100	C. CE. CHP 1uF 25V	
C9290	US662470	C. CE. CHP 470pF 50V	
C9291	WG888300	C. CE. M. CHP 10uF 6. 3V	
C9401	WH772100	C. EL 1000uF 10V	
C9402	UF037100	C. EL. CHP 10uF 16V	
C9404	WD758300	C. CE. CHP 10uF 10V	
C9406	WD758300	C. CE. CHP 10uF 10V	
C9412	US625100	C. CE. CHP 0. 100uF 10V	
C9413	US634100	C. CE. CHP 0. 01uF 16V	
C9416-9417	WJ344400	C. CE. CHP 22uF 6. 3V	
C9420-9421	US663390	C. CE. CHP 3900pF 50V	
C9422-9425	US663100	C. CE. CHP 1000pF 50V	
C9426-9429	US625100	C. CE. CHP 0. 100uF 10V	
C9430	US663330	C. CE. CHP 3300pF 50V	

\* New Parts

Ref No.	Part No.	Description	Markets
C9431	US643680	C. CE. CHP 6800pF 25V	
C9432-9433	WD758300	C. CE. CHP 10uF 10V	
C9434	UF037100	C. EL. CHP 10uF 16V	
C9435	UF038100	C. EL. CHP 100uF 16V	
C9436	US625100	C. CE. CHP 0. 100uF 10V	
C9437-9444	WD758300	C. CE. CHP 10uF 10V	
C9449-9450	WD758300	C. CE. CHP 10uF 10V	
C9453	WG888300	C. CE. M. CHP 10uF 6. 3V	
C9454	US625100	C. CE. CHP 0. 100uF 10V	
* C9456-9457	US662560	C. CE. CHP 560pF 50V	
C9460-9464	US662220	C. CE. CHP 220pF 50V	
C9470	US625100	C. CE. CHP 0. 100uF 10V	
* C9479	US643470	C. CE. CHP 4700pF 25V	
* D201-202	WR148500	DIODE RB521S-30TE61	
D351	WE674800	VARIATOR. CHIP AVRL161A1R1NTB	
D352-359	WP385600	VARIATOR. CHIP PESD0603-240	
D360-362	WE674800	VARIATOR. CHIP AVRL161A1R1NTB	
D601-602	WE674800	VARIATOR. CHIP AVRL161A1R1NTB	
D605	VV220700	DIODE. SCHOTTKY RB501V-40	
* D801	WR148500	DIODE RB521S-30TE61	
* D9402-9403	WW783900	DIODE 1SS355VM	
* D9404-9406	WR148500	DIODE RB521S-30TE61	
* F801	WY529500	FUSE 0. 8A 250V	
IC1-2	X8915B00	IC. HDMI S119185ACTU HDMI	
IC4	X8378A00	IC TC7SH125FU (TE85L, F	
IC5	YC286A00	IC RP130Q121D-TR-F	
IC6	YC289A00	IC RP130Q501D-TR	
IC7	X9292A00	IC R1172H121D-T1-F	
IC21	YD298A00	IC ADV7181CBSTZ	
IC22	X6671A00	IC ADV7172KSTZ	
IC23-25	X7787A00	IC TC74LCX245FT (EL, K)	
IC26	YC825A00	IC R1172S331D-E2-F	
IC27	YC287A00	IC RP130Q181D-TR-F	
IC33	YC288A00	IC RP130Q331D-TR-F	
* IC34	YC546A00	IC PCA9517ADP	
* IC52	X9745C00	IC. MEMORY M12L128168A-5TG2L	
IC53	X8378A00	IC TC7SH125FU (TE85L, F	
IC54	X9292A00	IC R1172H121D-T1-F	
IC61	X8560A00	IC. HDMI S119134CTU HDMI	
IC63	X0199B00	IC TC74VHC157FT (EL, K)	
IC64	X7787A00	IC TC74LCX245FT (EL, K)	
IC65	YD173A00	IC NJM2888F05 5. 0V	
IC68	X4063A00	IC TC7WHU04FU	
IC80	X8531A00	IC TC7WZ32FK	
IC82	YD406B00	IC. MEMORY MX29LV640EBT1-70G	(written)
* IC83	YD355A00	IC. MEMORY R1EX25512ATA00A EE	
IC84-85	X7942B00	IC TC74VHC273FT (EL, K)	
IC89	X5875A00	IC SN74LV4051APWR	
IC91	XZ493A00	IC TC74VHC86FT (EL) EX	
IC92	X4453A00	IC SN74LVC1G17DCKR	
* IC93	X9692A00	IC TC7WH126FU	
IC94	X8398A00	IC TC7SE108FU (T5L, JF)	U
IC95	XR680A00	IC TC7SH08FU (TE85L, JF)	U
IC96	X8531A00	IC TC7WZ32FK	
IC97-98	YC288A00	IC RP130Q331D-TR-F	
IC99	YC289A00	IC RP130Q501D-TR	
* IC902-903	YA480B00	IC. MEMORY NT5SV32M8CS-6K	

\* New Parts

## DIGITAL

Ref No.	Part No.	Description	Markets
IC904	YD404B00	IC. MEMORY	W25Q128BVF IG (written)
IC905	X7787A00	IC	TC74LCX245FT (EL, K)
IC914	YC287A00	IC	RP130Q181D-TR-F
IC915	YC289A00	IC	RP130Q501D-TR
IC916	X9292A00	IC	R1172H121D-T1-F
IC917	X4453A00	IC	SN74LVC1G17DCKR
IC922	X9625B00	IC. MEMORY	M12L64164A-5TG
IC923	YD401B00	IC. MEMORY	MX29LV160DBT1-70G (written)
IC924	YC213A00	IC	PCM9210PTR
IC926	X8531A00	IC	TC7WZ32FK
IC928	XR680A00	IC	TC7SH08FU (TE85L, JF)
IC929	X9292A00	IC	R1172H121D-T1-F
IC930	YC288A00	IC	RP130Q331D-TR-F
IC931	YC289A00	IC	RP130Q501D-TR
IC932	XR680A00	IC	TC7SH08FU (TE85L, JF)
IC941	X7375A00	IC	PCM1781DBOR
IC945-946	YA255A00	IC	R1172H501D-T1-F
IC948	YC291A00	IC	R1172N501D-TR-F
IC949	X4453A00	IC	SN74LVC1G17DCKR
PN941-943	WS488500	STYLE. PIN	L=90 #18
PN945	WS488500	STYLE. PIN	L=90 #18
Q1-10	VQ986700	TR	2SC4081 T106
Q17	WQ381000	FET	MCH6336-TL-E
* Q18	WW782000	TR. DGT	DTA044EUBTL
Q19	WQ381000	FET	MCH6336-TL-E
* Q20	WW782000	TR. DGT	DTA044EUBTL
Q61	WQ381000	FET	MCH6336-TL-E
* Q62	WW782000	TR. DGT	DTA044EUBTL
Q201	VR936300	TR	2SA1576A T106
Q202	WQ381000	FET	MCH6336-TL-E
Q203	WE834500	FET	UPA672T-T1-A
Q351-352	VQ986700	TR	2SC4081 T106
Q801	VR936300	TR	2SA1576A T106
* Q804-807	WY001400	TR. ARRAY	HN4B01JE
Q814	VQ986700	TR	2SC4081 T106
Q815-821	VR936300	TR	2SA1576A T106
Q9001	WQ381000	FET	MCH6336-TL-E
* Q9002	WW782000	TR. DGT	DTA044EUBTL
Q9005-9007	VQ986700	TR	2SC4081 T106
Q9201	WQ381000	FET	MCH6336-TL-E
* Q9202	WW782000	TR. DGT	DTA044EUBTL
* Q9401	WW782300	TR. DGT	DTC044EUBTL
* Q9402	WW781900	TR. DGT	DTA043EUBTL
Q9407	VR936300	TR	2SA1576A T106
R9419	WB784700	R. MTL. FLN	6.8Ω 1W
XL1	WR725300	RSNR. CRY	27MHz SMD-49
XL81	WA782500	RSNR. CE	8.000MHz
XL201	VZ772700	RSNR. CRY	28.63636MHz
* XL901	WY036300	RSNR. CRY	23.04MHz DSX321G
XL921	V3625700	RSNR. CRY	24.576MHz

\* New Parts

## OPERATION

Ref No.	Part No.	Description	Markets
* WY327100	P. C. B.	OPERATION	U
* WY327200	P. C. B.	OPERATION	C
* WY327300	P. C. B.	OPERATION	RTABGFLS
CB401	VQ045500	CN. BS. PIN	26P
CB402	VQ047200	CN. BS. PIN	9P
CB446	WQ680200	CN. USB	4P TE AAPVA004C0
CB451	VQ961100	CN. BS. PIN	8P
CB452	VQ962100	CN. BS. PIN	18P
CB453	VQ961800	CN. BS. PIN	15P
CB454	VQ961400	CN. BS. PIN	11P
CB455	VQ963000	CN. BS. PIN	9P
CB458	VQ044400	CN. BS. PIN	9P
CB459-461	V9357000	CN	19P TE
CB463	VQ585700	CN. JUMPER	7P
CB472	VB858300	CN. BS. PIN	4P
CB473	VK026900	CN	10P
C4002	US065100	C. CE. CHP	0.1uF 50V B
C4012-4013	US135100	C. CE. CHP	0.1uF 16V
C4015	UR268220	C. EL	220uF 50V
C4016	UM388330	C. EL	330uF 6.3V
C4017	US135100	C. CE. CHP	0.1uF 16V
C4018	US061680	C. CE. CHP	68pF 50V B
C4019	US065100	C. CE. CHP	0.1uF 50V B
C4020-4021	US163100	C. CE. CHP	1000pF 50V
C4022	US064100	C. CE. CHP	0.01uF 50V B
C4023-4024	US063100	C. CE. CHP	1000pF 50V B
C4025-4026	US065100	C. CE. CHP	0.1uF 50V B
C4027	US135100	C. CE. CHP	0.1uF 16V
C4028	US062100	C. CE. CHP	100pF 50V B
C4030	US062100	C. CE. CHP	100pF 50V B
C4031	US062470	C. CE. CHP	470pF 50V B
C4032-4033	US135100	C. CE. CHP	0.1uF 16V
C4034	UM417100	C. EL	10uF 50V
C4035	US135100	C. CE. CHP	0.1uF 16V
C4037	US064100	C. CE. CHP	0.01uF 50V B
C4039	US062220	C. CE. CHP	220pF 50V B
* C4081	WH773700	C. EL	470uF 16V
* C4082	WY034800	C. CE. CHP	0.022uF 50V
* C4083	WM490200	C. CE. M. CHP	0.47uF 50V
C4084	UM416100	C. EL	1uF 50V
C4085	UM416220	C. EL	2.2uF 50V
C4086	US046100	C. CE. CHP	1uF 25V
C4087	WG251600	C. CE. CHP	4.7uF 6.3V
C4091-4092	US135100	C. CE. CHP	0.1uF 16V
C4093-4094	US063680	C. CE. CHP	6800pF 50V B
C4201	US063100	C. CE. CHP	1000pF 50V B
C4202-4208	US062220	C. CE. CHP	220pF 50V B
C4209-4210	WG251600	C. CE. CHP	4.7uF 6.3V
C4211-4212	US062100	C. CE. CHP	100pF 50V B
C4214	US135100	C. CE. CHP	0.1uF 16V
C4215-4216	US062100	C. CE. CHP	100pF 50V B
C4217	UR237100	C. EL	10uF 16V
C4218-4219	UR267100	C. EL	10uF 50V
C4222-4223	UR067470	C. EL	47uF 50V
C4225	UR067100	C. EL	10uF 50V
C4225	WK041800	C. EL	10uF 16V
C4226	WK041800	C. EL	10uF 16V

\* New Parts

## RX-V671/HTR-6064

## OPERATION

Ref No.	Part No.	Description	Markets
C4226	UR067100	C. EL 10uF 50V	RTABGFLS
C4227-4228	UR237100	C. EL 10uF 16V	
C4229	WJ608100	C. MYLAR 100pF 100V	
C4230	WY466700	C. PP 820pF 100V	
C4231-4232	US063330	C. CE. CHP 3300pF 50V B	
C4234	WK041800	C. EL 10uF 16V	
C4235-4236	WJ608100	C. MYLAR 100pF 100V	
C4238	WK041800	C. EL 10uF 16V	
C4239	US135100	C. CE. CHP 0. 1uF 16V	
C4240	WY466700	C. PP 820pF 100V	
C4241	US135100	C. CE. CHP 0. 1uF 16V	
C4242	WK041800	C. EL 10uF 16V	UC
C4242	UR067100	C. EL 10uF 50V	RTABGFLS
C4243-4244	WG251600	C. CE. CHP 4. 7uF 6. 3V	
C4245	UR067100	C. EL 10uF 50V	UC
C4245	WK041800	C. EL 10uF 16V	RTABGFLS
C4246	UR238100	C. EL 100uF 16V	
C4250	UR067100	C. EL 10uF 50V	UC
C4250	WK041800	C. EL 10uF 16V	RTABGFLS
C4251	WK041800	C. EL 10uF 16V	UC
C4251	UR067100	C. EL 10uF 50V	RTABGFLS
C4252	WV894900	C. EL 10uF 71V	UC
C4252	UR367470	C. EL 47uF 50V	RTABGFLS
C4253	WY466700	C. PP 820pF 100V	
C4255	US062100	C. CE. CHP 100pF 50V B	
C4257	WJ611000	C. MYLAR 0. 047uF 100V	
C4258	UR267100	C. EL 10uF 50V	
C4259-4260	UR067100	C. EL 10uF 50V	
C4261	WJ609900	C. MYLAR 6800pF 100V	
C4262	US126100	C. CE. CHP 1uF 10V	
C4263	US062100	C. CE. CHP 100pF 50V B	
C4264	US126100	C. CE. CHP 1uF 10V	
C4265	UR067100	C. EL 10uF 50V	UC
C4265	WK041800	C. EL 10uF 16V	RTABGFLS
C4266	WK041800	C. EL 10uF 16V	UC
C4266	UR067100	C. EL 10uF 50V	RTABGFLS
C4267	US126100	C. CE. CHP 1uF 10V	
C4268	WJ608800	C. MYLAR 820pF 100V	UC
C4268	WY466700	C. PP 820pF 100V	RTABGFLS
C4271	US135100	C. CE. CHP 0. 1uF 16V	
C4272	WJ608800	C. MYLAR 820pF 100V	UC
C4272	WY466700	C. PP 820pF 100V	RTABGFLS
C4273	WK041800	C. EL 10uF 16V	UC
C4273	UR067100	C. EL 10uF 50V	RTABGFLS
C4274	UR067100	C. EL 10uF 50V	UC
C4274	WK041800	C. EL 10uF 16V	RTABGFLS
C4275	US062100	C. CE. CHP 100pF 50V B	
C4276	US063470	C. CE. CHP 4700pF 50V B	
C4277	US062100	C. CE. CHP 100pF 50V B	
C4278	US135100	C. CE. CHP 0. 1uF 16V	
C4279	UR067100	C. EL 10uF 50V	UC
C4279	WK041800	C. EL 10uF 16V	RTABGFLS
C4280	WK041800	C. EL 10uF 16V	UC
C4280	UR067100	C. EL 10uF 50V	RTABGFLS
C4281	WJ608800	C. MYLAR 820pF 100V	UC
C4281	WY466700	C. PP 820pF 100V	RTABGFLS
C4282	UR067470	C. EL 47uF 50V	

\* New Parts

Ref No.	Part No.	Description	Markets
C4284	US135100	C. CE. CHP 0. 1uF 16V	
C4285	UR067470	C. EL 47uF 50V	
C4287	WJ608800	C. MYLAR 820pF 100V	UC
C4287	WY466700	C. PP 820pF 100V	RTABGFLS
C4288	WK041800	C. EL 10uF 16V	
C4289	WK041800	C. EL 10uF 16V	UC
C4289	UR067100	C. EL 10uF 50V	RTABGFLS
C4290	UR067100	C. EL 10uF 50V	UC
C4290	WK041800	C. EL 10uF 16V	RTABGFLS
C4291	US062100	C. CE. CHP 100pF 50V B	
C4292	US063470	C. CE. CHP 4700pF 50V B	
C4293	UR238100	C. EL 100uF 16V	
C4294	WD758300	C. CE. CHP 10uF 10V	
C4295	US062100	C. CE. CHP 100pF 50V B	
C4318-4321	WJ610200	C. MYLAR 0. 01uF 100V	
C4401-4402	US063100	C. CE. CHP 1000pF 50V B	
* C4411-4412	WJ609500	C. MYLAR 3300pF 100V	
C4413	US064100	C. CE. CHP 0. 01uF 50V B	
C4414	US063100	C. CE. CHP 1000pF 50V B	
C4415	US135100	C. CE. CHP 0. 1uF 16V	
C4421	US063100	C. CE. CHP 1000pF 50V B	
C4422	UM397100	C. EL 10uF 16V	
C4423	WV360900	C. EL 22uF 16V	
C4424	US064100	C. CE. CHP 0. 01uF 50V B	
C4425	US062100	C. CE. CHP 100pF 50V B	
C4426	UM397470	C. EL 47uF 16V	
C4427	US061330	C. CE. CHP 33pF 50V B	
C4428	UM397100	C. EL 10uF 16V	
C4430	WV360900	C. EL 22uF 16V	
C4432	WV360900	C. EL 22uF 16V	
C4481	US063100	C. CE. CHP 1000pF 50V B	
C4482	US062100	C. CE. CHP 100pF 50V B	
C4487	WD758300	C. CE. CHP 10uF 10V	
C4901	US135100	C. CE. CHP 0. 1uF 16V	RTABGFLS
D4001-4002	VT332900	D10DE 1SS355	
D4006-4007	WS693300	D10DE. ZENR HZU4. 3B3 TRF-E	
D4010	VT332900	D10DE 1SS355	
D4011	V2598200	LED S1R-505ST	
D4012	VT332900	D10DE 1SS355	
D4081-4085	VT332900	D10DE 1SS355	
* D4086	VU173900	D10DE. ZENR UDZS36B TE-17 36V	
D4091-4094	VT332900	D10DE 1SS355	
D4203-4205	VT332900	D10DE 1SS355	
D4303	VT332900	D10DE 1SS355	
* D4401	WW172500	LED HLMP-NS30 BLUE	
D4411-4412	VT332900	D10DE 1SS355	
D4421-4422	VT332900	D10DE 1SS355	
D4423	VU171900	D10DE. ZENR UDZS5. 1B 5. 1V	
D4424	WR095700	LED 8224-10SDRD/S530A3	
D4901-4903	VT332900	D10DE 1SS355	UC
△ IC401	X6386A00	IC M66003-0131FP	
* IC451-454	X8136A00	IC LM833MX	
IC455	YD360A00	IC NJM2505A VIDEO AMP	
IC456	X9870A00	IC PCM1681PWPR	
IC457	X4928A00	IC KIA7805API 5V	
IC458	X7378A00	IC NJM4565M (TE1)	
IC459	YD360A00	IC NJM2505A VIDEO AMP	

\* New Parts

## OPERATION

Ref No.	Part No.	Description	Markets
△ IC471	X7378A00	IC	RTABGFLS U
△ IC481	YC288A00	IC	
△ IC491	YA381A00	IC	
JK451	VV269500	CN	
JK471	V9408200	JACK. PHONE	
JK472	WJ117300	JACK. MNI	
PJ401	WJ117500	JACK. PIN	
Q4001-4003	WC529400	TR	
Q4004	VV655400	TR. DGT	
Q4005	WC397700	TR	
Q4006-4009	WC529400	TR	CRTABGFLS
Q4012	WC529400	TR	
Q4081	WQ381000	FET	
Q4082	VV655400	TR. DGT	
△ * Q4083-4084	WW223000	TR	
△ Q4085	iA101510	TR	
Q4301	VV655400	TR. DGT	
Q4302	VV655000	TR. DGT	
Q4401-4402	WC529400	TR	
R4066-4067	WW969500	R. MTL. OXD	UC
R4225	WW965300	R. MTL. OXD	
* R4293	WQ963600	R. MTL. OXD	
R4320-4321	WW974100	R. MTL. OXD	
R4331-4332	WQ072300	R. MTL. OXD	
R4413-4414	V8071400	R. MTL. FLN	
RY461	WJ122400	RELAY	
ST451	V4040500	SCR. TERM	
ST461	V4040500	SCR. TERM	
SW401-409	WD483100	SW. TACT	
SW411-421	WD483100	SW. TACT	UC
SW471	V9597100	SW. RT. ENC	
SW472-473	WD483100	SW. TACT	
TE461	WB213900	TERM. SP	
TH491-492	WT698300	THERMISTOR	
* U4001	WW715100	L. DTCT	
V4001	WW890600	FL. DSPLY	
	V6007100	SPACER. FL	

\* New Parts

## OPERATION

Ref No.	Part No.	Description	Markets
*	WY328100	P. C. B.	U
*	WY328200	P. C. B.	A
*	WY328300	P. C. B.	C
CB401	VQ045500	CN. BS. PIN	U
CB402	VQ044400	CN. BS. PIN	
CB405	VK026300	CN. BS. PIN	
CB446	WQ680200	CN. USB	
CB451	VQ961100	CN. BS. PIN	
CB452	VQ962100	CN. BS. PIN	
CB453	VQ961800	CN. BS. PIN	
CB454	VQ961400	CN. BS. PIN	
CB455	VQ963000	CN. BS. PIN	
CB458	VQ047200	CN. BS. PIN	
CB459-461	V9357000	CN	U
CB463	VQ585700	CN. JUMPER	
CB471	VB858300	CN. BS. PIN	
C4001	US065100	C. CE. CHP	
C4002	US135100	C. CE. CHP	
C4003-4004	US063100	C. CE. CHP	
C4005	US135100	C. CE. CHP	
C4007	UR268220	C. EL	
C4008	UM388330	C. EL	
C4009	US135100	C. CE. CHP	
C4010	US061680	C. CE. CHP	U
C4011	US065100	C. CE. CHP	
C4012	US064100	C. CE. CHP	
C4013	US065100	C. CE. CHP	
C4017	US065100	C. CE. CHP	
C4018	US135100	C. CE. CHP	
C4019	US062100	C. CE. CHP	
C4021	US062100	C. CE. CHP	
C4022	US062470	C. CE. CHP	
C4023	UM417100	C. EL	
C4024-4025	US135100	C. CE. CHP	U
C4026	US062220	C. CE. CHP	
C4027	US063100	C. CE. CHP	
C4028-4030	US135100	C. CE. CHP	
C4031	US063100	C. CE. CHP	
C4032-4034	US135100	C. CE. CHP	
* C4081	WH773700	C. EL	
* C4082	WY034800	C. CE. CHP	
* C4083	WM490200	C. CE. M. CHP	
C4084	UM416100	C. EL	
C4085	UM416220	C. EL	U
C4086	US046100	C. CE. CHP	
C4087	WG251600	C. CE. CHP	
C4201	US063100	C. CE. CHP	
C4202-4208	US062220	C. CE. CHP	
C4209-4210	WG251600	C. CE. CHP	
C4211-4212	US062100	C. CE. CHP	
C4214	US135100	C. CE. CHP	
C4215-4216	US062100	C. CE. CHP	
C4217	UR237100	C. EL	
C4218-4219	UR267100	C. EL	U
C4222-4223	UR067470	C. EL	
C4225	UR067100	C. EL	
C4226	WK041800	C. EL	

\* New Parts



## RX-A710

## OPERATION

Ref No.	Part No.	Description	Markets	Ref No.	Part No.	Description	Markets
C4227-4228	UR237100	C. EL	10uF 16V	* C4405	WJ609500	C. MYLAR	3300pF 100V
C4229	WJ608100	C. MYLAR	100pF 100V	C4406	WV360900	C. EL	22uF 16V
C4230	WY466700	C. PP	820pF 100V	C4407	US064100	C. CE. CHP	0. 01uF 50V B
C4231-4232	US063330	C. CE. CHP	3300pF 50V B	C4408	US063100	C. CE. CHP	1000pF 50V B
C4234	WK041800	C. EL	10uF 16V	C4409	US062100	C. CE. CHP	100pF 50V B
C4235-4236	WJ608100	C. MYLAR	100pF 100V	C4410	UM387470	C. EL	47uF 16V
C4238	WK041800	C. EL	10uF 16V	C4411	US061330	C. CE. CHP	33pF 50V B
C4239	US135100	C. CE. CHP	0. 1uF 16V	C4414-4415	WV360900	C. EL	22uF 16V
C4240	WY466700	C. PP	820pF 100V	C4416	UM397100	C. EL	10uF 16V
C4241	US135100	C. CE. CHP	0. 1uF 16V	C4417-4419	US063100	C. CE. CHP	1000pF 50V B
C4242	WK041800	C. EL	10uF 16V	C4420-4422	US135100	C. CE. CHP	0. 1uF 16V
C4243-4244	WG251600	C. CE. CHP	4. 7uF 6. 3V	C4423	US062220	C. CE. CHP	220pF 50V B
C4245	UR067100	C. EL	10uF 50V	C4426	US062220	C. CE. CHP	220pF 50V B
C4246	UR238100	C. EL	100uF 16V	C4481	US063100	C. CE. CHP	1000pF 50V B
C4250	UR067100	C. EL	10uF 50V	C4482	US062100	C. CE. CHP	100pF 50V B
C4251	WK041800	C. EL	10uF 16V	C4487	WD758300	C. CE. CHP	10uF 10V
C4252	WV894900	C. EL	10uF 71V	C4901	US135100	C. CE. CHP	0. 1uF 16V
C4253	WY466700	C. PP	820pF 100V	D4003-4004	WS693300	D1ODE. ZENR	HZU4. 3B3 TRF-E
C4255	US062100	C. CE. CHP	100pF 50V B	D4005	V2598200	LED	S1R-505ST
C4257	WJ611000	C. MYLAR	0. 047uF 100V	* D4006	WW172500	LED	HLMP-NS30 BLUE
C4258	UR267100	C. EL	10uF 50V	D4007-4008	VT332900	D1ODE	1SS355
C4259-4260	UR067100	C. EL	10uF 50V	D4081-4085	VT332900	D1ODE	1SS355
C4261	WJ609900	C. MYLAR	6800pF 100V	* D4086	VU173900	D1ODE. ZENR	UDZS36B TE-17 36V
C4262	US126100	C. CE. CHP	1uF 10V	D4203-4205	VT332900	D1ODE	1SS355
C4263	US062100	C. CE. CHP	100pF 50V B	D4303	VT332900	D1ODE	1SS355
C4264	US126100	C. CE. CHP	1uF 10V	D4401-4404	VT332900	D1ODE	1SS355
C4265	UR067100	C. EL	10uF 50V	D4406	VU171900	D1ODE. ZENR	UDZS5. 1B 5. 1V
C4266	WK041800	C. EL	10uF 16V	D4407	WR095700	LED	8224-10SDRD/S530A3
C4267	US126100	C. CE. CHP	1uF 10V	D4408-4411	VT332900	D1ODE	1SS355
C4268	WJ608800	C. MYLAR	820pF 100V	D4901-4903	VT332900	D1ODE	1SS355
C4271	US135100	C. CE. CHP	0. 1uF 16V	△ IC401	X6386A00	IC	M66003-0131FP
C4272	WJ608800	C. MYLAR	820pF 100V	* IC451-454	X8136A00	IC	LM833MX
C4273	WK041800	C. EL	10uF 16V	IC455	YD360A00	IC	NJM2505A VIDEO AMP
C4274	UR067100	C. EL	10uF 50V	IC456	X9870A00	IC	PCM1681PWPR
C4275	US062100	C. CE. CHP	100pF 50V B	IC457	X4928A00	IC	K1A7805API 5V
C4276	US063470	C. CE. CHP	4700pF 50V B	IC458	X7378A00	IC	NJM4565M (TE1)
C4277	US062100	C. CE. CHP	100pF 50V B	IC459	YD360A00	IC	NJM2505A VIDEO AMP
C4278	US135100	C. CE. CHP	0. 1uF 16V	IC471	X7378A00	IC	NJM4565M (TE1)
C4279	UR067100	C. EL	10uF 50V	△ IC481	YC288A00	IC	RP130Q331D-TR-F
C4280	WK041800	C. EL	10uF 16V	IC491	YA381A00	IC	LM19C1Z/LF THERMAL
C4281	WJ608800	C. MYLAR	820pF 100V	JK451	VV269500	CN	8P DIN
C4282	UR067470	C. EL	47uF 50V	JK471	WC814400	JACK. MNI	JY-3554-01-130
C4284	US135100	C. CE. CHP	0. 1uF 16V	JK472	V9408200	JACK. PHONE	MSJ-064-05B GR
C4285	UR067470	C. EL	47uF 50V	PJ471	WJ117500	JACK. PIN	3P
C4287	WJ608800	C. MYLAR	820pF 100V	Q4001-4009	WC529400	TR	KTC3875S Y GR RTK
C4288-4289	WK041800	C. EL	10uF 16V	Q4010	WC397700	TR	2N5401C-AT
C4290	UR067100	C. EL	10uF 50V	Q4011	VV655400	TR. DGT	DTC114EKA
C4291	US062100	C. CE. CHP	100pF 50V B	Q4081	WQ381000	FET	MCH6336-TL-E
C4292	US063470	C. CE. CHP	4700pF 50V B	Q4082	VV655400	TR. DGT	DTC114EKA
C4293	UR238100	C. EL	100uF 16V	△ * Q4083-4084	WW223000	TR	2SC5964-TD-E
C4294	WD758300	C. CE. CHP	10uF 10V	△ Q4085	iA101510	TR	2SA1015 Y
C4295	US062100	C. CE. CHP	100pF 50V B	Q4301	VV655400	TR. DGT	DTC114EKA
C4318-4321	WJ610200	C. MYLAR	0. 01uF 100V	Q4302	VV655000	TR. DGT	DTA114EKA
C4401	US063100	C. CE. CHP	1000pF 50V B	Q4401	WC529400	TR	KTC3875S Y GR RTK
* C4402	WJ609500	C. MYLAR	3300pF 100V	R4225	WW965300	R. MTL. OXD	2. 2Ω 1/4W
C4403	UR067100	C. EL	10uF 50V	* R4293	WQ963600	R. MTL. OXD	22Ω 1W
C4404	US064100	C. CE. CHP	0. 01uF 50V B	R4320-4321	WW974100	R. MTL. OXD	10KΩ 1/4W

\* New Parts

\* New Parts

## OPERATION

Ref No.	Part No.	Description	Markets
R4331-4332	WQ072300	R. MTL. OXD 2.2Ω 1W	CA
R4407-4408	V8071400	R. MTL. FLM 560Ω 1W	
RY461	WJ122400	RELAY 981-2A-24DS-SP7	
ST451	V4040500	SCR. TERM M3	
ST461	V4040500	SCR. TERM M3	
ST471	V4040500	SCR. TERM M3	
SW402	WD483100	SW. TACT SKRGAAD010	
SW419	V9597100	SW. RT. ENC EC12E2460802	
SW422	WD483100	SW. TACT SKRGAAD010	
SW424-440	WD483100	SW. TACT SKRGAAD010	
SW472	WQ291600	SW. RT. ENC XREB12105PVB25FINA	UC
SW473	WD483100	SW. TACT SKRGAAD010	
TE461	WW728900	TERM. SP 4P	
TH491-492	WT698300	THERMISTOR WC92NA103J1	
* U4001	WW715100	L. DTCT SIR8430MH6	
V4001	WW890600	FL. DSPLY HNA-18MM03T	
	V6007100	SPACER. FL 10x32x4. 6	

\* New Parts

## MAIN

Ref No.	Part No.	Description	Markets
* WY332600	P. C. B.	MAIN	UCRTALS
* WY332700	P. C. B.	MAIN	BGF
CB152	VQ962900	CN. BS. PIN 8P	UCRTALS
CB153	VQ963900	CN. BS. PIN 18P	
CB154	VQ963600	CN. BS. PIN 15P	
CB155	VQ963200	CN. BS. PIN 11P	
C1001	UR257100	C. EL 10uF 35V	
C1001	WK041800	C. EL 10uF 16V	
C1002	UR257100	C. EL 10uF 35V	
C1002	WK041800	C. EL 10uF 16V	
C1003	UR257100	C. EL 10uF 35V	
C1003	WK041800	C. EL 10uF 16V	
C1004-1007	UR257100	C. EL 10uF 35V	UCRTALS
C1008	WN164200	C. PP 220pF 100V	
C1008	WE100900	C. PP 220pF 630V K	
C1009	WN164200	C. PP 220pF 100V	
C1009	WE100900	C. PP 220pF 630V K	
C1010	WN164200	C. PP 220pF 100V	
C1010	WE100900	C. PP 220pF 630V K	
C1011-1014	WN164200	C. PP 220pF 100V	
C1015	WQ107500	C. PP 120pF 100V	
C1015	WE100600	C. PP 120pF 630V K	
C1016	WQ107500	C. PP 120pF 100V	UCRTALS
C1016	WE100600	C. PP 120pF 630V K	
C1017	WQ107500	C. PP 120pF 100V	
C1017	WE100600	C. PP 120pF 630V K	
C1018-1021	WQ107500	C. PP 120pF 100V	
C1022	WN164900	C. PP 3300pF 100V	
C1022	WE102300	C. PP 3300pF 100V J	
C1023	WN164900	C. PP 3300pF 100V	
C1023	WE102300	C. PP 3300pF 100V J	
C1024	WN164900	C. PP 3300pF 100V	
C1024	WE102300	C. PP 3300pF 100V J	UCRTALS
C1025-1028	WN164900	C. PP 3300pF 100V	
C1029	UR067470	C. EL 47uF 50V	
C1030-1031	UR068100	C. EL 100uF 50V	
C1032-1035	UR067470	C. EL 47uF 50V	
C1036	WQ627600	C. CE 22pF 500V	
C1036	WE100200	C. PP 22pF 630V K	
C1037	WQ627600	C. CE 22pF 500V	
C1037	WE100200	C. PP 22pF 630V K	
C1038	WQ627600	C. CE 22pF 500V	
C1038	WE100200	C. PP 22pF 630V K	UCRTALS
C1039-1042	WQ627600	C. CE 22pF 500V	
* C1043	WJ608400	C. MYLAR 330pF 100V	
C1043	WE101100	C. PP 330pF 100V J	
* C1044	WJ608400	C. MYLAR 330pF 100V	
C1044	WE101100	C. PP 330pF 100V J	
* C1045	WJ608400	C. MYLAR 330pF 100V	
C1045	WE101100	C. PP 330pF 100V J	
* C1046-1049	WJ608400	C. MYLAR 330pF 100V	
C1050	UR067100	C. EL 10uF 50V	UCRTALS
C1050	UR267100	C. EL 10uF 50V	
C1051	UR067100	C. EL 10uF 50V	
C1051	UR267100	C. EL 10uF 50V	
C1052	UR067100	C. EL 10uF 50V	
C1052	UR267100	C. EL 10uF 50V	

\* New Parts

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## MAIN

Ref No.	Part No.	Description	Markets
C1053	UR067100	C. EL 10uF 50V	UCRTALS
C1053	UR267100	C. EL 10uF 50V	BGF
C1054	UR067100	C. EL 10uF 50V	UCRTALS
C1054	UR267100	C. EL 10uF 50V	BGF
C1055	UR067100	C. EL 10uF 50V	UCRTALS
C1055	UR267100	C. EL 10uF 50V	BGF
C1056	UR067100	C. EL 10uF 50V	UCRTALS
C1056	UR267100	C. EL 10uF 50V	BGF
C1057	WJ610600	C. MYLAR 0.022uF 100V	UCRTALS
C1057	WN165500	C. PP 0.022uF 100V	BGF
C1058	WJ610600	C. MYLAR 0.022uF 100V	UCRTALS
C1058	WN165500	C. PP 0.022uF 100V	BGF
C1059	WJ610600	C. MYLAR 0.022uF 100V	UCRTALS
C1059	WN165500	C. PP 0.022uF 100V	BGF
C1060	WJ610600	C. MYLAR 0.022uF 100V	UCRTALS
C1060	WN165500	C. PP 0.022uF 100V	BGF
C1061	WJ610600	C. MYLAR 0.022uF 100V	UCRTALS
C1061	WN165500	C. PP 0.022uF 100V	BGF
C1062	WJ610600	C. MYLAR 0.022uF 100V	UCRTALS
C1062	WN165500	C. PP 0.022uF 100V	BGF
C1063	WJ610600	C. MYLAR 0.022uF 100V	UCRTALS
C1063	WN165500	C. PP 0.022uF 100V	BGF
C1066-1067	WN156000	C. PP 1000pF 250V	
C1068	UR866470	C. EL 4.7uF 50V	
C1069	UR828220	C. EL 220uF 10V	
C1070-1073	UR297100	C. EL 10uF 100V	
C1074	UR267330	C. EL 33uF 50V	
C1075	UR257100	C. EL 10uF 35V	UCRTALS
C1075	UR067470	C. EL 47uF 50V	BGF
C1076	UR266100	C. EL 1uF 50V	
C1078	WJ611400	C. MYLAR 0.1uF 100V J	UCRTALS
C1078	WP421000	C. PP 0.047uF 100V	BGF
C1079	WJ611400	C. MYLAR 0.1uF 100V J	UCRTALS
C1079	WP421000	C. PP 0.047uF 100V	BGF
C1080-1081	WN165500	C. PP 0.022uF 100V	
C1082	UR049330	C. EL 3300uF 25V	
C1083	UR049220	C. EL 2200uF 25V	
△ C1084-1085	WN331300	C. EL 6800uF 71V	
C1086	UR049220	C. EL 2200uF 25V	
C1087-1088	UR237100	C. EL 10uF 16V	
C1509	UR067470	C. EL 47uF 50V	UCRTALS
C1509	UR238100	C. EL 100uF 16V	BGF
C1510-1512	US135100	C. CE. CHP 0.1uF 16V	
C1513-1514	US061220	C. CE. CHP 22pF 50V B	
C1515-1516	US135100	C. CE. CHP 0.1uF 16V	
C1517-1520	US062220	C. CE. CHP 220pF 50V B	
C1521	UR267100	C. EL 10uF 50V	
C1522	US061470	C. CE. CHP 47pF 50V B	
C1523	UR238100	C. EL 100uF 16V	
C1524	US061470	C. CE. CHP 47pF 50V B	
C1525	UR267100	C. EL 10uF 50V	
C1526-1527	UR238100	C. EL 100uF 16V	
C1528-1529	US062220	C. CE. CHP 220pF 50V B	
C1530	UR238100	C. EL 100uF 16V	
C1531	UR267330	C. EL 33uF 50V	
C1532-1533	UR238100	C. EL 100uF 16V	
C1534-1535	US062220	C. CE. CHP 220pF 50V B	

\* New Parts

Ref No.	Part No.	Description	Markets
C1536	UR238100	C. EL 100uF 16V	
C1542	US135100	C. CE. CHP 0.1uF 16V	
C1545	US135100	C. CE. CHP 0.1uF 16V	
C1547	UR267100	C. EL 10uF 50V	
C1549	UR267100	C. EL 10uF 50V	
C1553-1554	UR267220	C. EL 22uF 50V	
C1556	UR267100	C. EL 10uF 50V	
C1558	UR267470	C. EL 47uF 50V	UCRTALS
C1558	UR067470	C. EL 47uF 50V	BGF
C1559	UR267470	C. EL 47uF 50V	UCRTALS
C1559	UR067470	C. EL 47uF 50V	BGF
C1568	VR169200	C. MYLAR 0.47uF 50V	
C1571	UR267100	C. EL 10uF 50V	
C1572-1573	US062100	C. CE. CHP 100pF 50V B	
C1574	UR267100	C. EL 10uF 50V	
C1575	US061470	C. CE. CHP 47pF 50V B	
C1576	UR267100	C. EL 10uF 50V	
C1578	US061470	C. CE. CHP 47pF 50V B	
C1579	UR267100	C. EL 10uF 50V	
C1580	UR837100	C. EL 10uF 16V	
C1581-1582	US061470	C. CE. CHP 47pF 50V B	
C1583-1584	UR267470	C. EL 47uF 50V	
C1585	UR837100	C. EL 10uF 16V	
C1589-1590	UR267100	C. EL 10uF 50V	
C1600-1601	UR267100	C. EL 10uF 50V	
C1605	US064100	C. CE. CHP 0.01uF 50V B	
C1608	US044220	C. CE. CHP 0.022uF 25V B	
C1610	US064100	C. CE. CHP 0.01uF 50V B	
C1612-1613	US064100	C. CE. CHP 0.01uF 50V B	
△ D1001-1016	VT332900	DIODE 1SS355	
△ D1017-1023	VG437500	DIODE. ZENR MTZJ5. 1C 5.1V	
△ D1024-1039	VT332900	DIODE 1SS355	
△ D1040	WB212700	DIODE. BRG RS603M 6A 200V	UCRTALS
△ D1040	WK611100	DIODE. BRG D6SBN20 6A 200V	BGF
△ D1041	WH487300	DIODE. BRG RS203M 2A 200V	
D1042	VG440500	DIODE. ZENR MTZJ13B 13V	
D1043	VT332900	DIODE 1SS355	
△ D1044-1045	VG435500	DIODE. ZENR MTZJ2. 4B 2.4V	
D1501-1502	VG438400	DIODE. ZENR MTZJ6. 8C 6.8V	
G101	V5995800	PLATE. GND	
△ IC101	XJ608A00	IC NJM7812FA	
△ IC102	X4154A00	IC KIA7912P1	
IC152	XZ509A00	IC TC74VHC04FT INVER	
* IC153	YA361B00	IC R2A15220FP	
IC154	X7378A00	IC NJM4565M (TE1)	
PJ150	V9420700	JACK. PIN 2P MSP-252V1-30NI	
PJ151	V7046800	JACK. PIN 6P MSP-246V1-01NI	
PJ152	V7046700	JACK. PIN 4P MSP-244V1-01NI	
PJ155	V7046700	JACK. PIN 4P MSP-244V1-01NI	
PJ159	V7189700	JACK. PIN 1P	
Q1001-1014	V7421700	TR. CHP 2SC3324-GR, BL	
Q1015-1021	V3966800	TR 2SA949 0, Y	
△ Q1022-1028	WT676000	TR 2SD2705S	
△ Q1029-1035	VR325600	TR 2SC2229 0, Y	
△ Q1036-1042	V4096100	TR 2SC4614 S, T	
△ Q1043-1049	V4096000	TR 2SA1770 S, T	
△ Q1050-1056	VR355900	TR. PAIR A1695/C4468 OPY	(1X630850/630860)

\* New Parts

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## RX-A710

## MAIN

Ref No.	Part No.	Description	Markets
Q1057-1063	V7421700	TR. CHP	2SC3324-GR, BL
Q1064	V7421800	TR	2SA1312-GR, BL
Q1065	WF549900	TR	2SC3906K T146 R, S
△ Q1067-1068	WC292600	TR	KTA1837-U
△ Q1069-1070	WC398400	TR	2N5551C-AT
△ Q1071	WC397700	TR	2N5401C-AT
△ Q1072	VP872600	TR	2SA1708 S, T
Q1073	WC398500	TR. DGT	KRA102M-AT
Q1074	WC529200	TR. DGT	KRC102M-AT
Q1501-1502	WC883400	TR	2SD2704 K
Q1504	WC883400	TR	2SD2704 K
Q1507	WC883400	TR	2SD2704 K
Q1509	WC883400	TR	2SD2704 K
Q1511-1514	WC883400	TR	2SD2704 K
Q1520-1521	WC883400	TR	2SD2704 K
Q1524-1525	WC883400	TR	2SD2704 K
Q1527	WC883400	TR	2SD2704 K
R1001-1007	HF356100	R. CAR	1KΩ 1/2W
R1008-1014	HF356180	R. CAR	1.8KΩ 1/2W
R1022-1028	HF355330	R. CAR	330Ω 1/2W
R1029-1035	HL006120	R. MTL. OXD	1.2KΩ 1/2W
R1036-1042	V8070900	R. MTL. FLM	100Ω 1W
R1043-1049	V8072600	R. MTL. OXD	33KΩ 1W
R1079-1085	HL005120	R. MTL. OXD	120Ω 1/2W
R1086-1092	WG727400	R. MTL. FLM	2.7KΩ 1/4W
R1093-1099	WG725600	R. MTL. FLM	470Ω 1/4W
R1100-1106	WG726400	R. MTL. FLM	1KΩ 1/4W
R1107-1112	WG726200	R. MTL. FLM	820Ω 1/4W
△ * R1113-1118	WC862200	R. MTL. FLM	120Ω 1W
△ R1119-1126	HL005120	R. MTL. OXD	120Ω 1/2W
R1127-1133	HF355470	R. CAR	470Ω 1/2W
△ R1134-1147	HL004100	R. MTL. OXD	10Ω 1/2W
△ R1148-1154	WP839400	R. CEMENT	0.22+0.22 3W
△ R1176-1182	V8070300	R. MTL. FLM	10Ω 1W
△ R1197-1198	V8070200	R. MTL. FLM	4.7Ω 1W
△ R1211	WW966900	R. MTL. OXD	10Ω 1/4W
R1213	V8072100	R. MTL. OXD	5.6KΩ 1W
R1214	WW971100	R. MTL. OXD	560Ω 1/4W
R1219	V8072000	R. MTL. OXD	4.7KΩ 1W
△ R1222	V8071600	R. MTL. FLM	1KΩ 1W
△ R1234-1235	WW966900	R. MTL. OXD	10Ω 1/4W
R1236	WG726200	R. MTL. FLM	820Ω 1/4W
△ R1238	WC860900	R. MTL. FLM	10Ω 1W
* R1504	WC860100	R. MTL. FLM	2.2Ω 1W
R1573	WA621400	R. MTL. OXD	82Ω 1W J
R1573	WQ835700	R. MTL. OXD	82Ω 1W
R1575	WA621400	R. MTL. OXD	82Ω 1W J
R1575	WQ835700	R. MTL. OXD	82Ω 1W
* R1664-1665	WC862000	R. MTL. FLM	82Ω 1W
△ RY101	WE648700	RELAY	DC DH24D2-O-Q
U1500-1501	WH169900	CN. PHOTO. R	1P GP1FAV51RKOF
	WE774200	SCR. BND. HD	3x10 MFZN2W3

\* New Parts

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## VIDEO

Ref No.	Part No.	Description	Markets
* WY328900	P. C. B.	VIDEO	U
* WY329000	P. C. B.	VIDEO	C
* WY329100	P. C. B.	VIDEO	RS
* WY329200	P. C. B.	VIDEO	T
* WY329300	P. C. B.	VIDEO	A
* WY329400	P. C. B.	VIDEO	BGF
* WY329500	P. C. B.	VIDEO	L
CB302	VQ961200	CN. BS. PIN	9P
CB303	VM859700	CN. BS. PIN	16P
CB323	VQ047200	CN. BS. PIN	9P
CB324	VQ047500	CN. BS. PIN	20P
CB340	LB918020	CN. BS. PIN	2P
CB342	VL844800	CN. BS. PIN	4P
CB343	VZ130900	CN. JUMPER	4P
CB344	VQ585500	CN. JUMPER	5P
CB346	VB390000	CN. BS. PIN	4P
CB371	VG879900	CN. BS. PIN	2P
CB372-373	WN103000	CLIP. FUSE	TP00351-31
CB374	VG879900	CN. BS. PIN	2P
CB376	VQ961400	CN. BS. PIN	11P
CB377	VQ963200	CN. BS. PIN	11P
CB381-382	WN103000	CLIP. FUSE	TP00351-31
CB383	VK026400	CN. BS. PIN	5P
CB391	VQ044100	CN. BS. PIN	5P
C3001	US062100	C. CE. CHP	100pF 50V B
C3002-3004	US060800	C. CE. CHP	8pF 50V B
C3005	US062100	C. CE. CHP	100pF 50V B
C3006	UR237470	C. EL	47uF 16V
C3007-3008	US135100	C. CE. CHP	0.1uF 16V
C3009	UR237470	C. EL	47uF 16V
C3011	US060300	C. CE. CHP	3pF 50V B
C3012	UR837470	C. EL	47uF 16V
C3013-3014	US060300	C. CE. CHP	3pF 50V B
C3015-3017	US135100	C. CE. CHP	0.1uF 16V
C3018	UR267100	C. EL	10uF 50V
C3019	US135100	C. CE. CHP	0.1uF 16V
C3020	UR267100	C. EL	10uF 50V
C3021-3025	US135100	C. CE. CHP	0.1uF 16V
C3026	UR267100	C. EL	10uF 50V
C3027	WD758300	C. CE. CHP	10uF 10V
C3029	WD758300	C. CE. CHP	10uF 10V
C3031	WD758300	C. CE. CHP	10uF 10V
C3033	UR837470	C. EL	47uF 16V
C3035-3037	WD758300	C. CE. CHP	10uF 10V
C3043-3044	US135100	C. CE. CHP	0.1uF 16V
C3045	UR837470	C. EL	47uF 16V
C3047	US135100	C. CE. CHP	0.1uF 16V
C3048	UR238220	C. EL	220uF 16V
C3049	UR837470	C. EL	47uF 16V
C3050	US135100	C. CE. CHP	0.1uF 16V
C3051	UR238220	C. EL	220uF 16V
C3063	US135100	C. CE. CHP	0.1uF 16V
C3065	UR237470	C. EL	47uF 16V
C3067	US135100	C. CE. CHP	0.1uF 16V
C3072	US135100	C. CE. CHP	0.1uF 16V
C3073	UR238220	C. EL	220uF 16V
C3077	US135100	C. CE. CHP	0.1uF 16V

\* New Parts

## RX-V671/HTR-6064

## VIDEO

Ref No.	Part No.	Description	Markets	Ref No.	Part No.	Description	Markets
C3080-3085	WD758300	C. CE. CHP	10uF 10V	D3350	VU172800	D10DE. ZENR	UDZS12B 12V RS
C3201	US135100	C. CE. CHP	0. 1uF 16V	D3403-3407	VT332900	D10DE	1SS355
C3217	US062100	C. CE. CHP	100pF 50V B	D3601-3602	VT332900	D10DE	1SS355
C3221	US062100	C. CE. CHP	100pF 50V B	D3701	WW872000	D10DE. BRG	DBL155G 1. 5A 600
C3303-3304	WJ611400	C. MYLAR	0. 1uF 100V J	△ D3702	VV463000	D10DE. CHP	1. 1A 200V D1FL20U
C3309-3310	WG601700	C. EL	4700uF 16V	△ D3703	WW170700	D10DE	SARS05
C3311-3312	UR866100	C. EL	1uF 50V	D3704	WW745500	D10DE. SCHOTTKY	RB215T-90 20A 90V
C3314	UR266100	C. EL	1uF 50V	△ D3706-3715	VT332900	D10DE	1SS355
C3319	UR266100	C. EL	1uF 50V	D3801-3802	VV659300	D10DE. ZENR	RLZ7. 5B 7. 5V RTABGFLS
C3320-3321	UR267330	C. EL	33uF 50V	D3901-3902	VT332900	D10DE	1SS355 BGF
C3403-3409	WJ610200	C. MYLAR	0. 01uF 100V	△ F3701	WR944000	FUSE	2A 250V
C3410-3416	WJ610400	C. MYLAR	0. 015uF 100V	△ F3702	WQ211100	FUSE	8A 125V UCRS
C3603-3604	US063100	C. CE. CHP	1000pF 50V B	△ F3702	WM933100	FUSE	T5A 250V TABGFL
C3606	US064100	C. CE. CHP	0. 01uF 50V B	△ F3801	KB000780	FUSE	T5A 250V RS
△ C3701	WJ361200	C. POL. MTL	0. 047uF 400V	IC301-303	XY879A00	IC	TC74HC4053AF (EL)
△ C3701	WJ361800	C. POL. MTL	0. 022uF 630V	IC305	X6742A00	IC	LA73050-TLM-E
△ C3702-3703	WQ902300	C. CE. SAFTY	1000pF 250V	IC306	X2904A00	IC	NJM2581M VIDEO AMP
△ C3704	V5877700	C. MYLAR	0. 22uF 250V	IC307	XY549A00	IC	TC74HC4051AFEL
△ C3705	WJ605200	C. MYLAR	0. 015uF 50V	IC308	X7779A00	IC	LC709004A-TLM-E
△ * C3706	WW766000	C. EL	220uF 220V	IC310	X8875A00	IC	FHP3350IM14X
△ * C3706	WW766100	C. EL	150. 00 400V	IC333	X4928A00	IC	K1A7805API 5V
△ C3706	WQ852500	C. EL	68uF 400V	IC334	X6143A00	IC	NJM2388F05 5. 0V
△ C3707	WQ939400	C. CE. SAFTY	0. 01uF 250V	△ * IC371	YD188A00	IC	STR2A153
△ C3708	UR867220	C. EL	22uF 50V	△ IC372	WP388200	PHOT. CPL	TLP781 (D4-GR, F)
* C3710	WR246900	C. CE. CHP	3300pF 250V	△ IC373	YA276A00	IC	TL431AC 2. 5-36V
△ * C3711	WY685500	C. CE. SAFTY	3300pF 250V	△ IC374	WP388200	PHOT. CPL	TLP781 (D4-GR, F)
△ C3712	WJ361200	C. POL. MTL	0. 047uF 400V	IC381	X3505A00	IC	NJM2068MD-TE2 RTABGFLS
△ C3712	WJ361800	C. POL. MTL	0. 022uF 630V	IC391	XZ509A00	IC	TC74VHC04FT INVER BGF
* C3714-3715	WH776400	C. EL	2200uF 25V	JK321	V9435700	JACK. MNI	MSJ-035-12APC
C3716	US034470	C. CE. CHP	0. 047uF 16V B	JK361-362	V9435700	JACK. MNI	MSJ-035-12APC
C3718	WH771600	C. EL	220uF 10V	JK391	V6931000	CN. DIN	1P YKF51-5506 BGF
C3719	US064100	C. CE. CHP	0. 01uF 50V B	PJ301	WG505100	JACK. PIN	6P
C3720	V7887800	C. EL	1uF 50V	PJ302	V7189800	JACK. PIN	1P
C3721	WJ335500	C. EL	2. 2uF 50V	PJ303	WH381400	JACK. PIN	3P JACK G, B, R
C3722	US135100	C. CE. CHP	0. 1uF 16V	PJ304	V7189800	JACK. PIN	1P
C3723	US064100	C. CE. CHP	0. 01uF 50V B	PJ305-306	V7190000	JACK. PIN	2P
C3724	US135100	C. CE. CHP	0. 1uF 16V	PJ381	WD599600	JACK. PIN	2P MSP-252V2-06 NI RTABGFLS
C3725	WJ608900	C. MYLAR	1000pF 100V	Q3001	VR936300	TR	2SA1576A T106
C3801-3802	UR237470	C. EL	47uF 16V	Q3204	iA101510	TR	2SA1015 Y
C3803-3804	WJ603700	C. MYLAR	1000pF 50V	Q3205	iC181510	TR	2SC1815 Y
C3805-3806	UR267100	C. EL	10uF 50V	Q3206	WG538600	TR	KTA1046-Y-U/P
C3807-3808	WJ605600	C. MYLAR	0. 033uF 50V	Q3207	iC181510	TR	2SC1815 Y
C3809-3810	WJ604900	C. MYLAR	9100pF 50V	Q3302	iA101510	TR	2SA1015 Y
C3811-3812	UR218220	C. EL	220uF 6. 3V	Q3303	WG538600	TR	KTA1046-Y-U/P
C3813-3814	WJ603100	C. MYLAR	220pF 50V	Q3304	iA101510	TR	2SA1015 Y
C3815-3816	WJ603100	C. MYLAR	220pF 50V	Q3305	iC181510	TR	2SC1815 Y
C3817	US064100	C. CE. CHP	0. 01uF 50V B	Q3306	WC529500	TR	KTA1504S Y GR RTK
C3901	US064100	C. CE. CHP	0. 01uF 50V B	Q3405	VV655400	TR. DGT	DTC114EKA
C3902	US062120	C. CE. CHP	120pF 50V B	Q3406	VV655000	TR. DGT	DTA114EKA
C3903	US062220	C. CE. CHP	220pF 50V B	Q3407	VV655400	TR. DGT	DTC114EKA
C3904	US135100	C. CE. CHP	0. 1uF 16V	Q3408	VV655000	TR. DGT	DTA114EKA
C3905	UR837470	C. EL	47uF 16V	Q3409	VV655400	TR. DGT	DTC114EKA
C3906	UR837100	C. EL	10uF 16V	Q3410	VV655000	TR. DGT	DTA114EKA
C3907	UR818470	C. EL	470uF 6. 3V	Q3411	VV655400	TR. DGT	DTC114EKA
C3908	US064100	C. CE. CHP	0. 01uF 50V B	Q3412	VV655000	TR. DGT	DTA114EKA
△ D3304	WH487300	DIODE. BRG	RS203M 2. 0A 200V	Q3413	VV655400	TR. DGT	DTC114EKA
D3310	VT332900	DIODE	1SS355	Q3414	VV655000	TR. DGT	DTA114EKA

\* New Parts

\* New Parts



## VIDEO

Ref No.	Part No.	Description	Markets
Q3701-3702	VQ986700	TR	2SC4081 T106
Q3703	VV655700	TR. DGT	DTC144EKA
R3021	WW964500	R. MTL. OXD	1Ω 1/4W
R3025	WW964500	R. MTL. OXD	1Ω 1/4W
R3046-3049	WW964500	R. MTL. OXD	1Ω 1/4W
R3060-3061	WW964500	R. MTL. OXD	1Ω 1/4W
* R3213	WW966300	R. MTL. OXD	5.6Ω 1/4W
△ R3304	HL002220	R. MTL. OXD	0.22Ω 1/2W
R3315-3316	WW973300	R. MTL. OXD	4.7KΩ 1/4W
R3350	WW972500	R. MTL. OXD	2.2KΩ 1/4W
R3403-3406	WW974100	R. MTL. OXD	10KΩ 1/4W
△ R3703	WU547900	R. OTHER	3MΩ 1/2W
R3801	WC862900	R. MTL. FLM	470Ω 1W
R3801	WQ964700	R. MTL. OXD	470Ω 1W
R3802	WC862900	R. MTL. FLM	470Ω 1W
R3802	WQ964700	R. MTL. OXD	470Ω 1W
R3910	WW965300	R. MTL. OXD	2.2Ω 1/4W
RY341-345	WJ122400	RELAY	981-2A-24DS-SP7
△ RY371	WQ804100	RELAY	DC DLS5D1-0(M) 0.25
△ SW381	WV382900	SW. SLIDE	SL14
△ * T3701	YD325A00	TRANS. PWR	
TE341	WW728900	TERM. SP	4P
TE341	WW726500	TERM. SP	4P
TE342	WW726600	TERM. SP	6P
TE342	WW728800	TERM. SP	6P
TE343	WW728900	TERM. SP	4P
TE343	WW726500	TERM. SP	4P
△ TH371	WF544600	PTC. THERMISTOR	NTPAD5R1LDNBO 5.1
	WE774200	SCR. BND. HD	3x10 MFZN2W3

\* New Parts

## VIDEO

Ref No.	Part No.	Description	Markets
*	WY329700	P. C. B.	VIDEO
*	WY329800	P. C. B.	VIDEO
*	WY330400	P. C. B.	VIDEO
CB302	VQ961200	CN. BS. PIN	9P
CB303	VM859700	CN. BS. PIN	16P
CB323	VQ047200	CN. BS. PIN	9P
CB324	VQ047500	CN. BS. PIN	20P
CB340	LB918020	CN. BS. PIN	2P
CB342	VL844800	CN. BS. PIN	4P
CB343	VZ130900	CN. JUMPER	4P
CB344	VQ585500	CN. JUMPER	5P
CB346	VB390000	CN. BS. PIN	4P
CB371	VG879900	CN. BS. PIN	2P
CB372-373	WN103000	CLIP. FUSE	TP00351-31
CB376	VQ961400	CN. BS. PIN	11P
CB377	VQ963200	CN. BS. PIN	11P
CB383	VK026400	CN. BS. PIN	5P
C3001	US062100	C. CE. CHP	100pF 50V B
C3002-3004	US060800	C. CE. CHP	8pF 50V B
C3005	US062100	C. CE. CHP	100pF 50V B
C3006	UR237470	C. EL	47uF 16V
C3007-3008	US135100	C. CE. CHP	0.1uF 16V
C3009	UR237470	C. EL	47uF 16V
C3011	US060300	C. CE. CHP	3pF 50V B
C3012	UR837470	C. EL	47uF 16V
C3013-3014	US060300	C. CE. CHP	3pF 50V B
C3015-3017	US135100	C. CE. CHP	0.1uF 16V
C3018	UR267100	C. EL	10uF 50V
C3019	US135100	C. CE. CHP	0.1uF 16V
C3020	UR267100	C. EL	10uF 50V
C3021-3025	US135100	C. CE. CHP	0.1uF 16V
C3026	UR267100	C. EL	10uF 50V
C3027	WD758300	C. CE. CHP	10uF 10V
C3029	WD758300	C. CE. CHP	10uF 10V
C3031	WD758300	C. CE. CHP	10uF 10V
C3033	UR837470	C. EL	47uF 16V
C3035-3037	WD758300	C. CE. CHP	10uF 10V
C3043-3044	US135100	C. CE. CHP	0.1uF 16V
C3045	UR837470	C. EL	47uF 16V
C3047	US135100	C. CE. CHP	0.1uF 16V
C3048	UR238220	C. EL	220uF 16V
C3049	UR837470	C. EL	47uF 16V
C3050	US135100	C. CE. CHP	0.1uF 16V
C3051	UR238220	C. EL	220uF 16V
C3063	US135100	C. CE. CHP	0.1uF 16V
C3065	UR237470	C. EL	47uF 16V
C3067	US135100	C. CE. CHP	0.1uF 16V
C3072	US135100	C. CE. CHP	0.1uF 16V
C3073	UR238220	C. EL	220uF 16V
C3077	US135100	C. CE. CHP	0.1uF 16V
C3080-3085	WD758300	C. CE. CHP	10uF 10V
C3201	US135100	C. CE. CHP	0.1uF 16V
C3217	US062100	C. CE. CHP	100pF 50V B
C3221	US062100	C. CE. CHP	100pF 50V B
C3303-3304	WJ611400	C. MYLAR	0.1uF 100V J
C3309-3310	WG601700	C. EL	4700uF 16V
C3311-3312	UR866100	C. EL	1uF 50V

\* New Parts

RX-A710

VIDEO

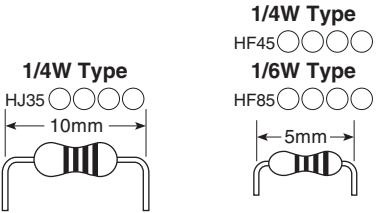
Carbon Resistors

Ref No. Part No. Description Markets						Ref No. Part No. Description Markets					
	C3314	UR266100	C. EL	1uF	50V		IC310	X8875A00	IC	FHP33501M14X	
	C3319	UR266100	C. EL	1uF	50V		IC333	X4928A00	IC	K1A7805API 5V	
	C3320-3321	UR267330	C. EL	33uF	50V		IC334	X6143A00	IC	NJM2388F05 5.0V	
	C3403-3409	WJ610200	C. MYLAR	0. 01uF	100V	△ *	IC371	YD188A00	IC	STR2A153	
	C3410-3416	WJ610400	C. MYLAR	0. 015uF	100V	△	IC372	WP388200	PHOT. CPL	TLP781 (D4-GR, F)	
	C3603-3604	US063100	C. CE. CHP	1000pF	50V B	△	IC373	YA276A00	IC	TL431AC 2. 5-36V	
	C3606	US064100	C. CE. CHP	0. 01uF	50V B	△	IC374	WP388200	PHOT. CPL	TLP781 (D4-GR, F)	
△	C3701	WJ361200	C. POL. MTL	0. 047uF	400V		IC381	X3505A00	IC	NJM2068MD-TE2	A
△	C3701	WJ361800	C. POL. MTL	0. 022uF	630V		JK321	V9435700	JACK. MNI	MSJ-035-12APC	
△	C3704	V5877700	C. MYLAR	0. 22uF	250V		JK361-362	V9435700	JACK. MNI	MSJ-035-12APC	
△	C3705	WJ605200	C. MYLAR	0. 015uF	50V		PJ301	WG505100	JACK. PIN	6P	
△ *	C3706	WW766000	C. EL	220uF	220V		PJ302	V7189800	JACK. PIN	1P	
△	C3706	WQ852500	C. EL	68uF	400V		PJ303	WH381400	JACK. PIN	3P JACK G, B, R	
△	C3707	WQ939400	C. CE. SAFTY	0. 01uF	250V		PJ304	V7189800	JACK. PIN	1P	
△	C3708	UR867220	C. EL	22uF	50V		PJ305-306	V7190000	JACK. PIN	2P	
△ *	C3710	WR246900	C. CE. CHP	3300pF	250V		PJ381	WD599600	JACK. PIN	2P MSP-252V2-06 NI	A
△ *	C3711	WY685500	C. CE. SAFTY	3300pF	250V		Q3001	VR936300	TR	2SA1576A T106	
△	C3712	WJ361200	C. POL. MTL	0. 047uF	400V		Q3204	iA101510	TR	2SA1015 Y	
△	C3712	WJ361800	C. POL. MTL	0. 022uF	630V		Q3205	iC181510	TR	2SC1815 Y	
	C3713	WJ322300	C. CE. M. CHP	1000pF	630V		Q3206	WG538600	TR	KTA1046-Y-U/P	
*	C3714-3715	WH776400	C. EL	2200uF	25V		Q3207	iC181510	TR	2SC1815 Y	
	C3716	US034470	C. CE. CHP	0. 047uF	16V B		Q3302	iA101510	TR	2SA1015 Y	
	C3718	WH771600	C. EL	220uF	10V		Q3303	WG538600	TR	KTA1046-Y-U/P	
	C3719	US064100	C. CE. CHP	0. 01uF	50V B		Q3304	iA101510	TR	2SA1015 Y	
	C3720	V7887800	C. EL	1uF	50V		Q3305	iC181510	TR	2SC1815 Y	
	C3721	WJ335500	C. EL	2. 2uF	50V		Q3306	WC529500	TR	KTA1504S Y GR RTK	
	C3722	US135100	C. CE. CHP	0. 1uF	16V		Q3405	VV655400	TR. DGT	DTC114EKA	
	C3723	US064100	C. CE. CHP	0. 01uF	50V B		Q3406	VV655000	TR. DGT	DTA114EKA	
	C3724	US135100	C. CE. CHP	0. 1uF	16V		Q3407	VV655400	TR. DGT	DTC114EKA	
	C3725	WJ608900	C. MYLAR	1000pF	100V		Q3408	VV655000	TR. DGT	DTA114EKA	
△	C3732-3733	WQ902300	C. CE. SAFTY	1000pF	250V		Q3409	VV655400	TR. DGT	DTC114EKA	
	C3801-3802	UR237470	C. EL	47uF	16V	A	Q3410	VV655000	TR. DGT	DTA114EKA	
	C3803-3804	WJ603700	C. MYLAR	1000pF	50V	A	Q3411	VV655400	TR. DGT	DTC114EKA	
	C3805-3806	UR267100	C. EL	10uF	50V	A	Q3412	VV655000	TR. DGT	DTA114EKA	
	C3807-3808	WJ605600	C. MYLAR	0. 033uF	50V	A	Q3413	VV655400	TR. DGT	DTC114EKA	
	C3809-3810	WJ604900	C. MYLAR	9100pF	50V	A	Q3414	VV655000	TR. DGT	DTA114EKA	
	C3811-3812	UR218220	C. EL	220uF	6. 3V	A	Q3701-3702	VQ986700	TR	2SC4081 T106	
	C3813-3814	WJ603100	C. MYLAR	220pF	50V	A	Q3703	VV655700	TR. DGT	DTC144EKA	
	C3817	US064100	C. CE. CHP	0. 01uF	50V B	A	R3021	WW964500	R. MTL. OXD	1Ω 1/4W	
△	D3304	WH487300	DIODE. BRG	RS203M 2. 0A 200V			R3025	WW964500	R. MTL. OXD	1Ω 1/4W	
	D3310	VT332900	DIODE	1SS355			R3046-3049	WW964500	R. MTL. OXD	1Ω 1/4W	
	D3403-3407	VT332900	DIODE	1SS355			R3060-3061	WW964500	R. MTL. OXD	1Ω 1/4W	
	D3601-3602	VT332900	DIODE	1SS355		*	R3213	WW966300	R. MTL. OXD	5. 6Ω 1/4W	
△	D3701	WW872000	DIODE. BRG	DBL155G 1. 5A 600		△	R3304	HL002220	R. MTL. OXD	0. 22Ω 1/2W	
△	D3702	VV463000	DIODE. CHP	1. 1A 200V D1FL20U			R3315-3316	WW973300	R. MTL. OXD	4. 7KΩ 1/4w	
△	D3703	WW170700	DIODE	SARS05			R3403-3406	WW974100	R. MTL. OXD	10KΩ 1/4W	
	D3704	WW745500	DIODE. SCHOTTKY	RB215T-90 20A 90V		△	R3703	WU547900	R. OTHER	3MΩ 1/2W	
	D3706-3715	VT332900	DIODE	1SS355			R3801-3802	WQ964700	R. MTL. OXD	470Ω 1W	A
	D3801-3802	VV659300	DIODE. ZENR	RLZ7. 5B 7. 5V	A		RY341-345	WJ122400	RELAY	981-2A-24DS-SP7	
△	F3701	WR944000	FUSE	2A 250V		△	RY371	WQ804100	RELAY	DC DLS5D1-0 (M) 0. 25	
△	F3702	WQ211100	FUSE	8A 125V	UC	△ *	T3701	YD325A00	TRANS. PWR		
△	F3702	WW933100	FUSE	T5A 250V	A		TE341	WW728900	TERM. SP	4P	
	IC301-303	XY879A00	IC	TC74HC4053AF (EL)			TE342	WW726600	TERM. SP	6P	
	IC305	X6742A00	IC	LA73050-TLM-E			TE343	WW728900	TERM. SP	4P	
	IC306	X2904A00	IC	NJM2581M VIDEO AMP		△	TE371	WB782600	INLET. AC	R-30190 (26)	
	IC307	XY549A00	IC	TC74HC4051AFEL		△	TH371	WF544600	PTC. THERMISTOR	NTPAD5R1LDNBO 5. 1	
	IC308	X7779A00	IC	LC709004A-TLM-E				WE774200	SCR. BND. HD	3x10 MFZN2W3	

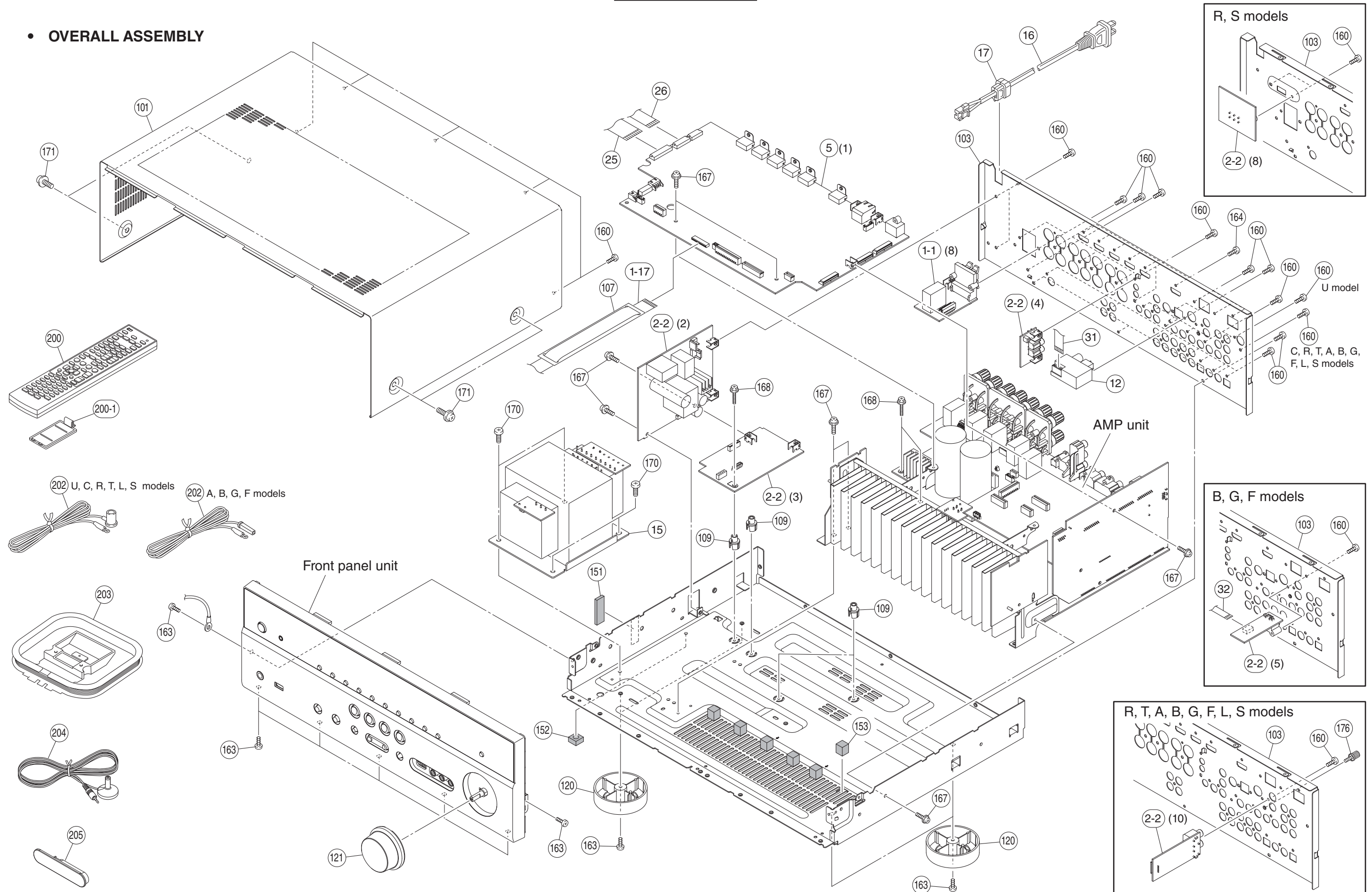
\* New Parts

\* New Parts

Value	1/4W Type Part No.	1/6W Type Part No.	Value	1/4W Type Part No.	1/6W Type Part No.
1.0 Ω	HJ35 3100	HF85 3100	11 kΩ	HF45 7110	HF45 7110
1.8 Ω	HJ35 3180	※	12 kΩ	HJ35 7120	HF85 7120
2.2 Ω	HJ35 3220	HF85 3220	13 kΩ	HF45 7130	HF45 7130
3.3 Ω	HJ35 3330	HF85 3330	15 kΩ	HF45 7150	HF45 7150
4.7 Ω	HJ35 3470	HF85 3470	18 kΩ	HF45 7180	HF45 7180
5.6 Ω	HJ35 3560	HF85 3560	22 kΩ	HF45 7220	HF45 7220
10 Ω	HF45 4100	HF45 4100	24 kΩ	HF45 7240	HF45 7240
15 Ω	HJ35 4150	HF85 4150	27 kΩ	HJ35 7270	HF85 7270
22 Ω	HF45 4220	HF45 4220	30 kΩ	HF45 7300	HF45 7300
27 Ω	HJ35 4270	HF85 4270	33 kΩ	HF45 7330	HF45 7330
33 Ω	HF45 4330	HF45 4330	36 kΩ	HF45 7360	HF45 7360
39 Ω	HJ35 4470	HF85 4390	39 kΩ	HF45 7390	HF45 7390
47 Ω	HF45 4470	HF45 4470	47 kΩ	HF45 7470	HF45 7470
56 Ω	HF45 4560	HF45 4560	51 kΩ	HF45 7510	HF45 7510
68 Ω	HF45 4680	HF45 4680	56 kΩ	HF45 7560	HF45 7560
75 Ω	HF45 4750	HF45 4750	62 kΩ	HF45 7620	HF45 7620
82 Ω	HF45 4820	HF45 4820	68 kΩ	HF45 7680	HF45 7680
91 Ω	HF45 4910	HF45 4910	82 kΩ	HF45 7820	HF45 7820
100 Ω	HF45 5100	HF45 5100	91 kΩ	HF45 7910	HF45 7910
110 Ω	HJ35 5110	HF85 5110	100 kΩ	HF45 8100	HF45 8100
120 Ω	HF45 5120	HF45 5120	110 kΩ	HF45 8110	HF45 8110
150 Ω	HF45 5150	HF45 5150	120 kΩ	HF45 8120	HF45 8120
160 Ω	HJ35 5160	※	130 kΩ	HF45 8130	※
180 Ω	HF45 5180	HF45 5180	150 kΩ	HF45 8150	HF45 8150
200 Ω	HF45 5200	HF45 5200	180 kΩ	HF45 8180	HF45 8180
220 Ω	HF45 5220	HF45 5220	220 kΩ	HJ35 8220	HF85 8220
270 Ω	HF45 5270	HF45 5270	270 kΩ	HF45 8270	HF45 8270
330 Ω	HF45 5330	HF45 5330	300 kΩ	HF45 8300	HF45 8300
390 Ω	HF45 5390	HF45 5390	330 kΩ	HF45 8330	HF45 8330
430 Ω	HF45 5430	HF45 5430	390 kΩ	HJ35 8390	HF85 8390
470 Ω	HF45 5470	HF45 5470	470 kΩ	HF45 8470	HF45 8470
510 Ω	HF45 5510	HF45 5510	560 kΩ	HJ35 8560	HF85 8560
560 Ω	HF45 5560	HF45 5560	680 kΩ	HJ35 8680	HF85 8680
680 Ω	HF45 5680	HF45 5680	820 kΩ	HJ35 8820	HF85 8820
820 Ω	HF45 5820	HF45 5820	1.0 MΩ	HF45 9100	HF45 9100
910 Ω	HF45 5910	HF45 5910	1.2 MΩ	HJ35 9120	※
1.0 kΩ	HF45 6100	HF45 6100	1.5 MΩ	HJ35 9150	HF85 9150
1.2 kΩ	HF45 6120	HF45 6120	1.8 MΩ	HJ35 9180	HF85 9180
1.5 kΩ	HF45 6150	HF45 6150	2.2 MΩ	HJ35 9220	HF85 9220
1.8 kΩ	HF45 6180	HF45 6180	3.3 MΩ	HJ35 9330	HF85 9330
2.0 kΩ	HJ35 6200	HF85 6200	3.9 MΩ	HJ35 9390	※
2.2 kΩ	HF45 6220	HF45 6220	4.7 MΩ	HJ35 9470	HF85 9470
2.4 kΩ	HJ35 6240	HF85 6240			
2.7 kΩ	HF45 6270	HF45 6270			
3.0 kΩ	HF45 6300	HF45 6300			
3.3 kΩ	HF45 6330	HF45 6330			
3.6 kΩ	HJ35 6360	HF85 6360			
3.9 kΩ	HF45 6390	HF45 6390			
4.7 kΩ	HF45 6470	HF45 6470			
5.1 kΩ	HF45 6510	HF45 6510			
5.6 kΩ	HF45 6560	HF45 6560			
6.8 kΩ	HF45 6680	HF45 6680			
8.2 kΩ	HF45 6820	HF45 6820			
9.1 kΩ	HF45 6910	HF45 6910			
10 kΩ	HF45 7100	HF45 7100			



※ : Not available





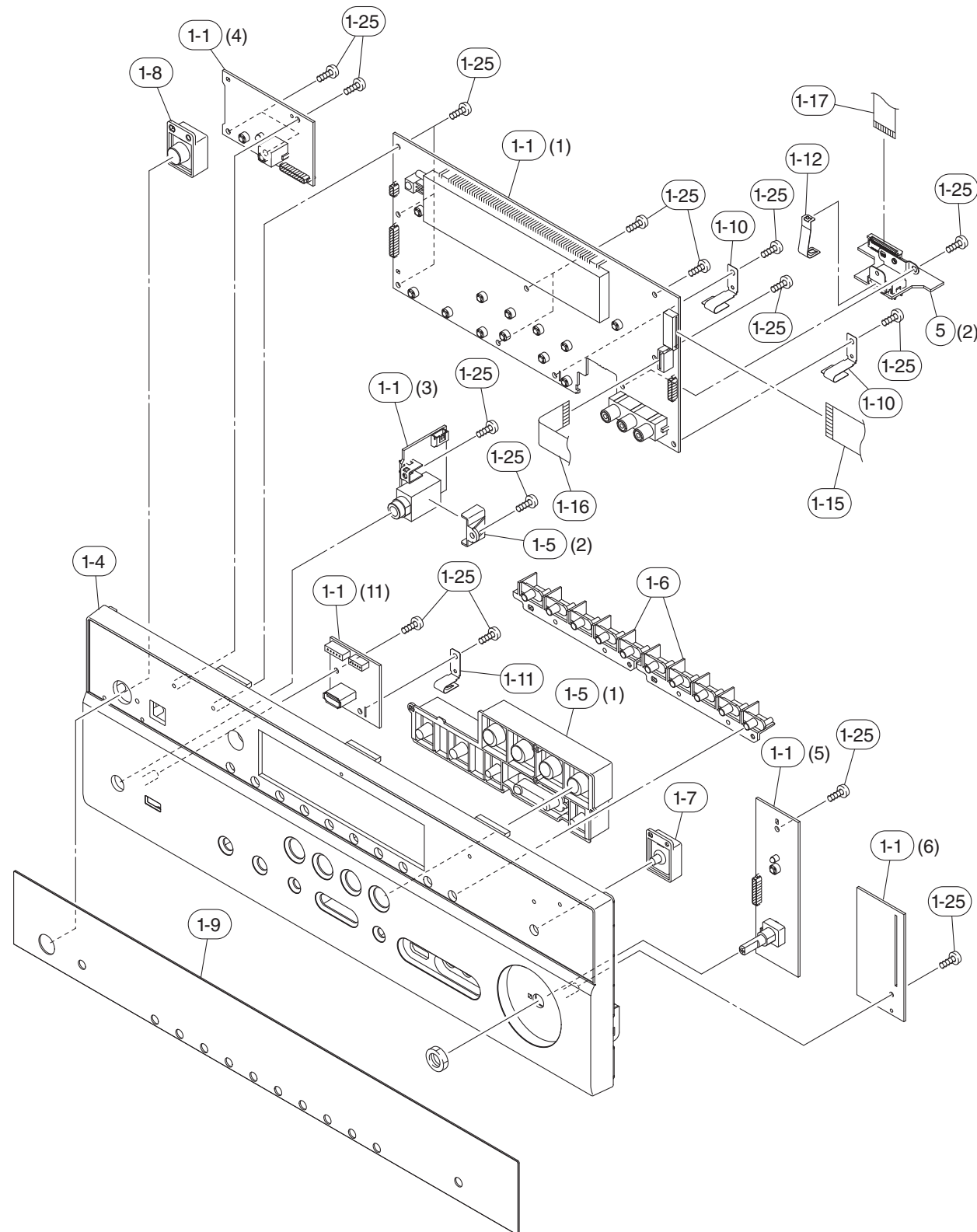
	Ref No.	Part No.	Description	Remarks	Markets
*	1-1	WY327100	P. C. B. ASSEMBLY	OPERATION	U
*	1-1	WY327200	P. C. B. ASSEMBLY	OPERATION	C
*	1-1	WY327300	P. C. B. ASSEMBLY	OPERATION	RTABGFLS
	1-17	WQ083500	FLEXIBLE FLAT CABLE	20P 180mm P=1.0	
*	2-2	WY328900	P. C. B. ASSEMBLY	VIDEO	U
*	2-2	WY329000	P. C. B. ASSEMBLY	VIDEO	C
*	2-2	WY329100	P. C. B. ASSEMBLY	VIDEO	RS
*	2-2	WY329200	P. C. B. ASSEMBLY	VIDEO	T
*	2-2	WY329300	P. C. B. ASSEMBLY	VIDEO	A
*	2-2	WY329400	P. C. B. ASSEMBLY	VIDEO	BGF
*	2-2	WY329500	P. C. B. ASSEMBLY	VIDEO	L
*	5	WY331100	P. C. B. ASSEMBLY	DIGITAL	U
*	5	WY331200	P. C. B. ASSEMBLY	DIGITAL	CRTALS
*	5	WY331300	P. C. B. ASSEMBLY	DIGITAL	BGF
*	12	WW891000	AM/FM TUNER	FAEH08-W02	UCRTLS
*	12	WW891100	AM/FM TUNER	FAEH08-E02	ABGF
△	*	YD387A00	POWER TRANSFORMER		UC
△	*	YD388A00	POWER TRANSFORMER		RS
△	*	YD389A00	POWER TRANSFORMER		T
△	*	YD390A00	POWER TRANSFORMER		AL
△	*	YD391A00	POWER TRANSFORMER		BGF
△	16	WR336800	POWER CABLE	2m	UC
△	16	WC992700	POWER CABLE	2m	R
△	16	WV836600	POWER CABLE	2m	T
△	16	WC743700	POWER CABLE	2m	A
△	16	WB212200	POWER CABLE	2m	B
△	16	WR336900	POWER CABLE	2m	GFL
△	16	WV583400	POWER CABLE	2m	S
	17	V2438700	CORD STOPPER	10P1	
*	25	WY194300	FLEXIBLE FLAT CABLE	20P 250mm P=1.25	
*	26	WY194200	FLEXIBLE FLAT CABLE	16P 300mm P=1.25	
*	31	WY194600	FLEXIBLE FLAT CABLE	9P 100mm P=1.25	
	32	WU249700	FLEXIBLE FLAT CABLE	5P 300mm P=1.25	BGF
*	101	WW844500	TOP COVER	GD	
*	101	WW844300	TOP COVER	BL	
*	101	WW844400	TOP COVER	TI	
*	103	WW843200	REAR PANEL	V671	U
*	103	WW843300	REAR PANEL	V671	C
*	103	WW843400	REAR PANEL	V671	RS
*	103	WW843500	REAR PANEL	V671	T
*	103	WW843600	REAR PANEL	V671	A
*	103	WW844000	REAR PANEL	6064	A
*	103	WW843700	REAR PANEL	V671	BGF
*	103	WW844100	REAR PANEL	6064	F
*	103	WW843800	REAR PANEL	V671	L
	107	WR946700	BARRIER	FFC	
	109	WQ664500	SUPPORT	H8	
	120	V0042500	LEG	D60xH21 GD	GD
	120	VS025000	LEG	D60xH21 HS	BL, TI
*	121	WW583200	KNOB	D52 VOLUME	GD
*	121	WW583000	KNOB	D52 VOLUME	BL
*	121	WW583100	KNOB	D52 VOLUME	TI

\* New Parts

	Ref No.	Part No.	Description	Remarks	Markets
	151	WB870100	DAMPER	30x10x4	
	152	WC879000	DAMPER	SCREW MASK	
	153	WR377400	DAMPER	14x10x10	
	160	WE774100	BIND HEAD BONDING B-T. SCREW	3x8 MFZN2B3	
	163	WE774300	BIND HEAD B-TIGHT SCREW	3x8 MFZN2W3	
	164	WE877900	BIND HEAD S-TIGHT SCREW	3x6 MFZN2W3	
	167	WFO02600	PW HEAD B-TIGHT SCREW	3x8 MFZN2W3	
	168	WE774600	IC SCREW	3x18 MFZN2W3	
	170	WU048900	BIND HEAD S-TIGHT SCREW	4x10 MFZN2W3	
	171	VD069600	PW HEAD S-TIGHT SCREW	4x8-10 MFN133	GD, TI
	171	VH313200	PW HEAD S-TIGHT SCREW	4x8-10 MFN13BL	BL
	176	AA627310	GROUND TERMINAL		RTABGLF
			ACCESSORIES		
*	200	WW510800	REMOTE CONTROL	RAV436	000-213240060 U
*	200	WW510900	REMOTE CONTROL	RAV437	000-213240050 C
*	200	WW511000	REMOTE CONTROL	RAV438	000-213240070 RTABGFLS
	200-1	AAX82380	BATTERY COVER	Black	CG-2209
	202	V6267000	FM ANTENNA	1.4m 1pc	UCRTLS
	202	VQ147100	FM ANTENNA	1.4m 1pc	ABGF
	203	VR248500	AM ANTENNA	1.0m 1pc	
	204	WN649600	YPAO MICROPHONE	6.0m 1pc	EM6022L-HN1700
	205	WU187800	VIDEO AUX INPUT COVER	1pc	GD
	205	WU187600	VIDEO AUV INPUT COVER	1pc	BL
	205	WU187700	VIDEO AUX INPUT COVER	1pc	TI
			BATTERY	R03, AAA, UM-4 2pcs	

\* New Parts

- **FRONT PANEL UNIT**



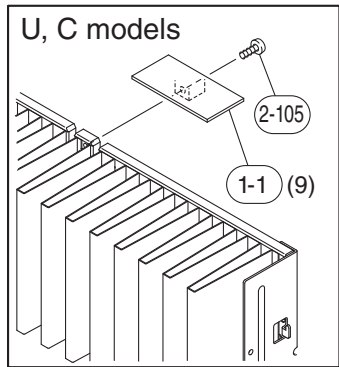
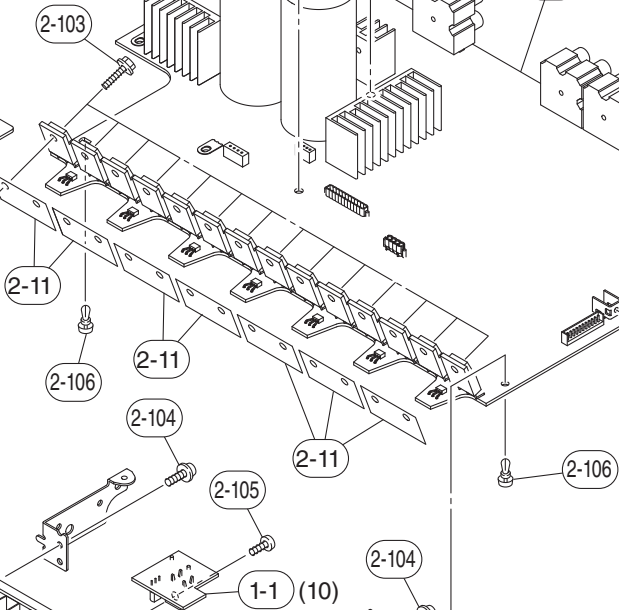
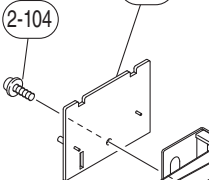
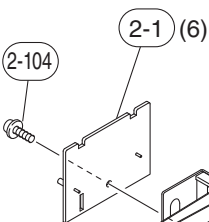
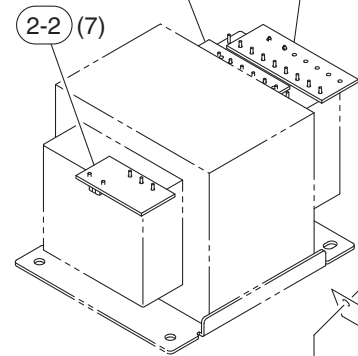
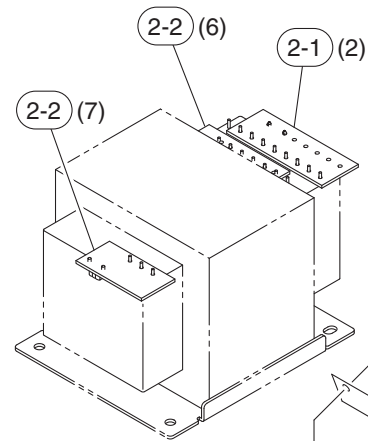
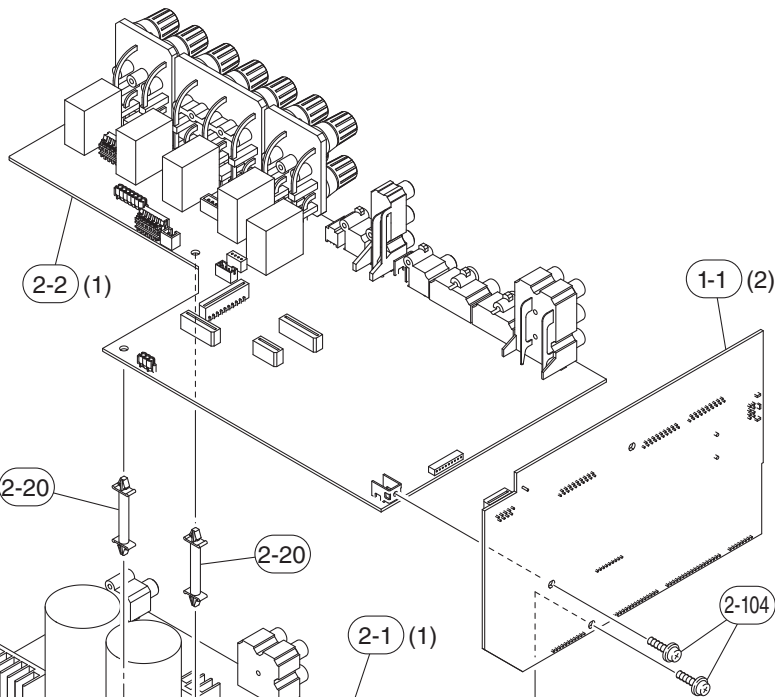
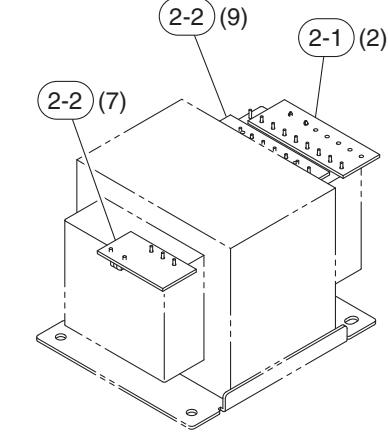
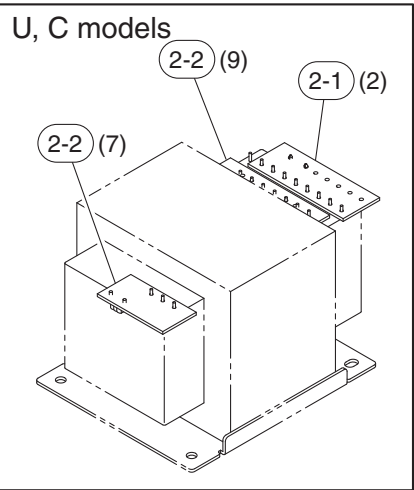
Ref No.	Part No.	Description	Remarks	Markets
* 1-1	WY327100	P. C. B. ASSEMBLY	OPERATION	U
* 1-1	WY327200	P. C. B. ASSEMBLY	OPERATION	C
* 1-1	WY327300	P. C. B. ASSEMBLY	OPERATION	RTABGFLS
* 1-4	WW871000	FRONT PANEL	GD	
* 1-4	WW870600	FRONT PANEL	BL	U
* 1-4	WW870800	FRONT PANEL	BL	CRTABGFLS
* 1-4	WW870900	FRONT PANEL	TI	
1-5	WT822500	BUTTON	GD	
1-5	WT822300	BUTTON	BL	
1-5	WT822400	BUTTON	TI	
1-6	WT823900	BUTTON		
1-7	WT871300	BUTTON	PURE DIRECT	
1-8	WT843800	BUTTON	POWER	
* 1-9	WW871100	WINDOW SHEET	V671	U
* 1-9	WW871200	WINDOW SHEET	V671	CRTABGFLS
* 1-9	WW871300	WINDOW SHEET	6064	
* 1-10	WY031500	EARTH PLATE	OPERATION	
* 1-11	WY030900	EARTH PLATE	USB	
* 1-12	WY032300	EARTH PLATE	HDMI	
* 1-15	WY194400	FLEXIBLE FLAT CABLE	26P 350mm P=1.25	
1-16	WR482000	FLEXIBLE FLAT CABLE	9P 300mm P=1.25	
1-17	WQ083500	FLEXIBLE FLAT CABLE	20P 180mm P=1.0	
1-25	WE774800	BIND HEAD P-TIGHT SCREW	3x8 MFZN2W3	
* 5	WY331100	P. C. B. ASSEMBLY	DIGITAL	U
* 5	WY331200	P. C. B. ASSEMBLY	DIGITAL	CRTALS
* 5	WY331300	P. C. B. ASSEMBLY	DIGITAL	BGF

\* New Parts



RX-V671/HTR-6064

• AMP UNIT



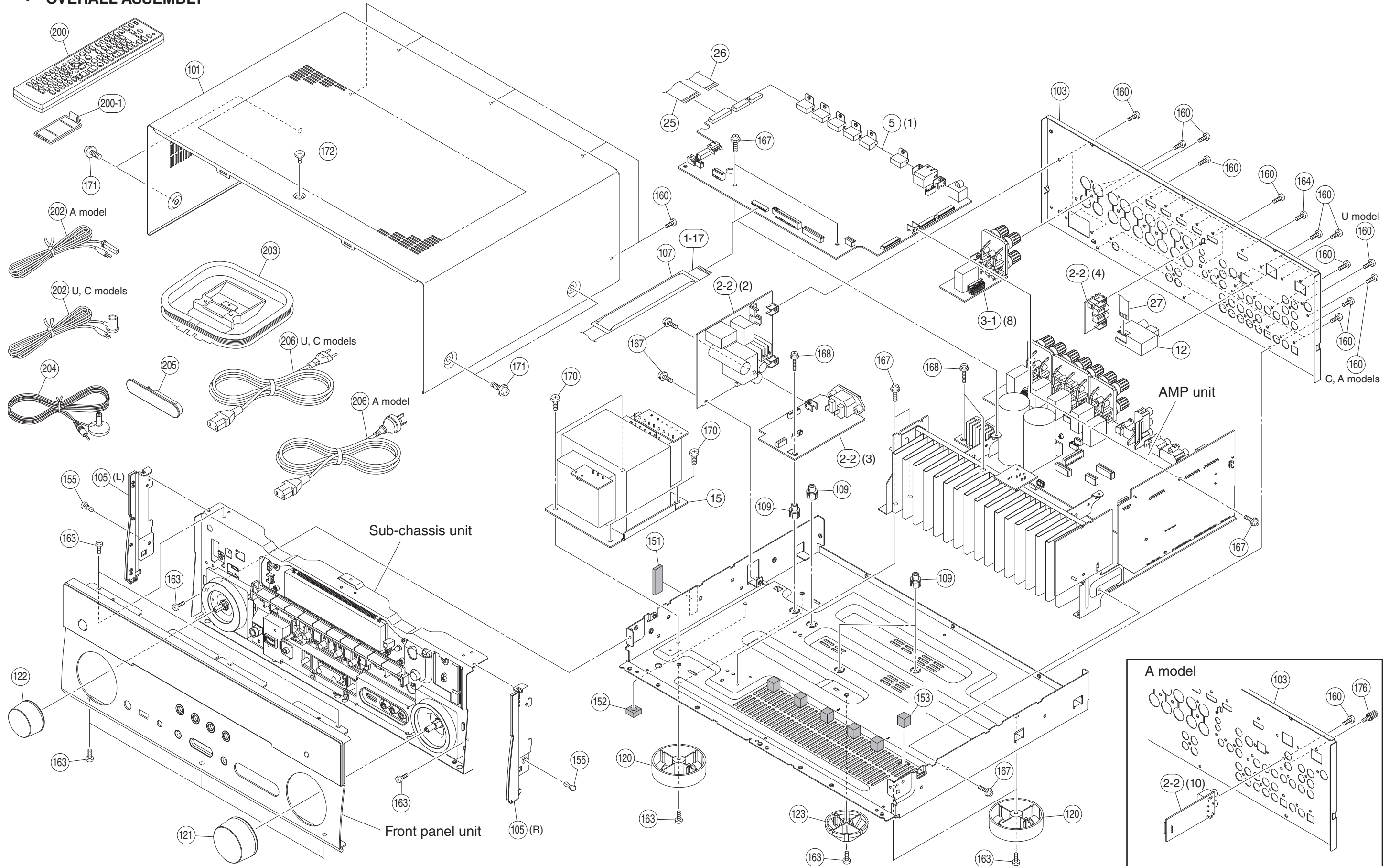
1-1 (7)

2-104

Ref No.	Part No.	Description	Remarks	Markets
* 1-1	WY327100	P. C. B. ASSEMBLY	OPERATION	U
* 1-1	WY327200	P. C. B. ASSEMBLY	OPERATION	C
* 1-1	WY327300	P. C. B. ASSEMBLY	OPERATION	RTABGFLS
* 2-1	WY332600	P. C. B. ASSEMBLY	MAIN	UCRTALS
* 2-1	WY332700	P. C. B. ASSEMBLY	MAIN	BGF
* 2-2	WY328900	P. C. B. ASSEMBLY	VIDEO	U
* 2-2	WY329000	P. C. B. ASSEMBLY	VIDEO	C
* 2-2	WY329100	P. C. B. ASSEMBLY	VIDEO	RS
* 2-2	WY329200	P. C. B. ASSEMBLY	VIDEO	T
* 2-2	WY329300	P. C. B. ASSEMBLY	VIDEO	A
* 2-2	WY329400	P. C. B. ASSEMBLY	VIDEO	BGF
* 2-2	WY329500	P. C. B. ASSEMBLY	VIDEO	L
2-11	WQ753200	RADIATION SHEET	40x23x0.06 MICA	
2-20	WS000800	SPACER SUPPORT	LCA4-29M PIN	
2-103	WM220800	HEXAGONAL HEAD B-TIGHT SCREW	3x15 SP MFZN2W3	
2-104	WF002600	PW HEAD B-TIGHT SCREW	3x8 MFZN2W3	
2-105	WE774300	BIND HEAD B-TIGHT SCREW	3x8 MFZN2W3	
2-106	VQ368600	PUSH RIVET	P3555-B	

\* New Parts

• OVERALL ASSEMBLY



RX-A710

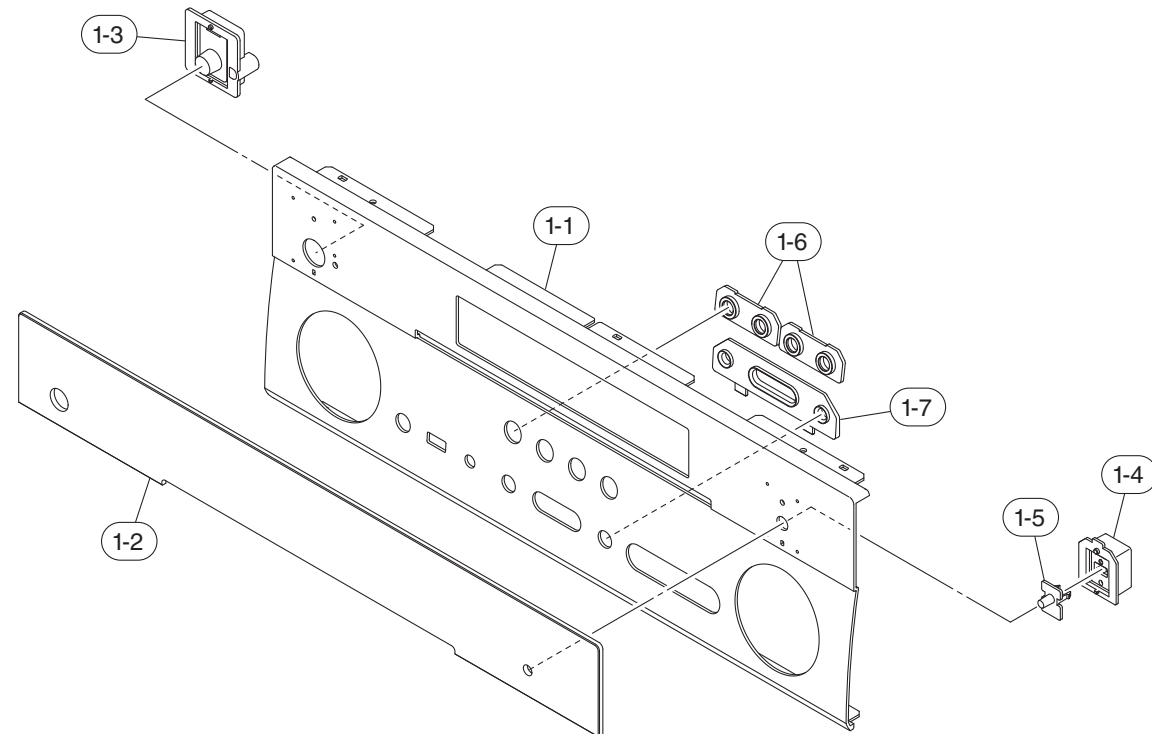
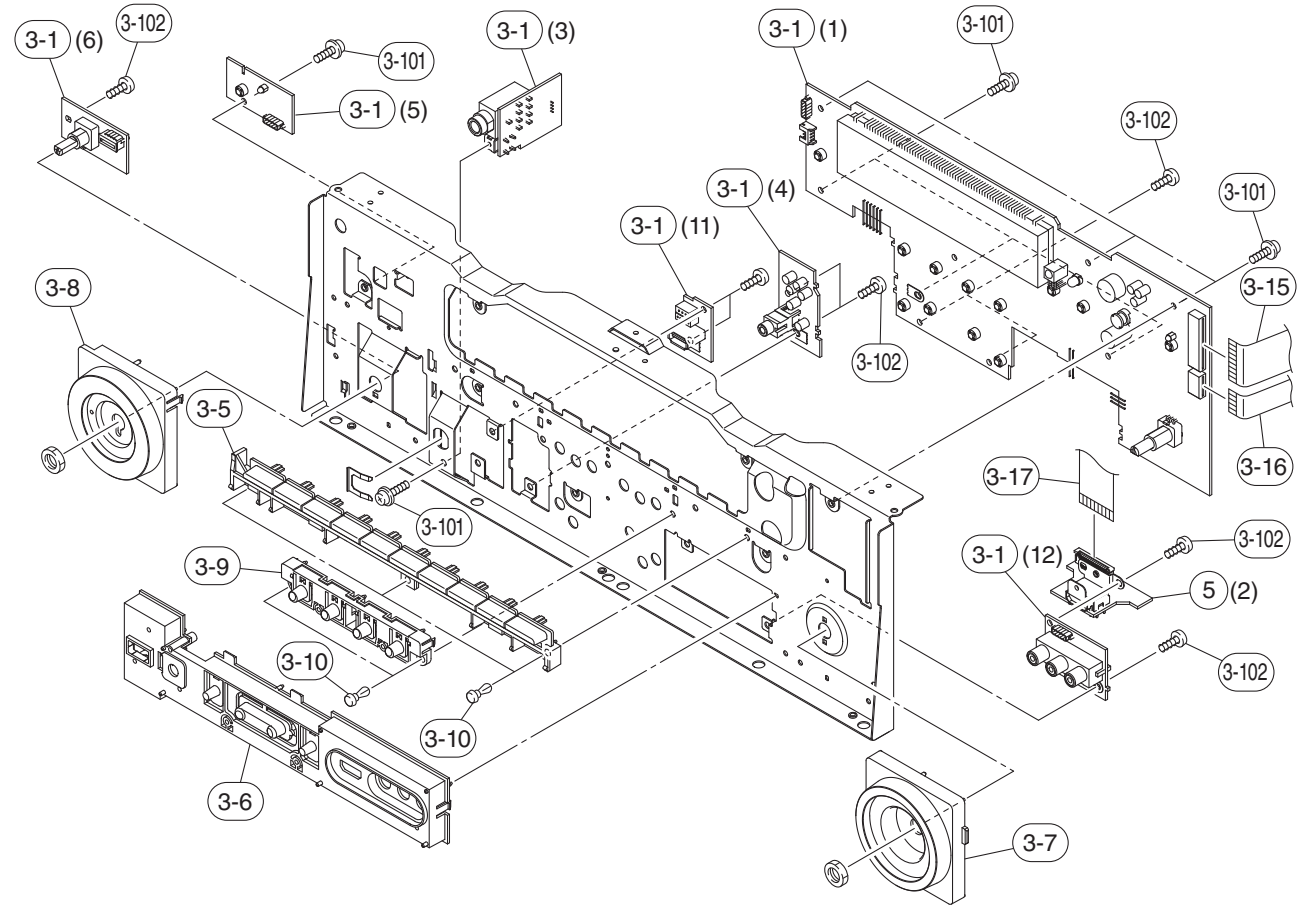
	Ref No.	Part No.	Description		Remarks	Markets
	1-17	WQ083500	FLEXIBLE FLAT CABLE	20P 180mm P=1.0		
*	2-2	WY329700	P. C. B. ASSEMBLY	VIDEO		U
*	2-2	WY330400	P. C. B. ASSEMBLY	VIDEO		C
*	2-2	WY329800	P. C. B. ASSEMBLY	VIDEO		A
*	3-1	WY328100	P. C. B. ASSEMBLY	OPERATION		U
*	3-1	WY328300	P. C. B. ASSEMBLY	OPERATION		C
*	3-1	WY328200	P. C. B. ASSEMBLY	OPERATION		A
*	5	WY331100	P. C. B. ASSEMBLY	DIGITAL		U
*	5	WY331200	P. C. B. ASSEMBLY	DIGITAL		CA
*	12	WW891000	AM/FM TUNER	FAEH08-W02		UC
*	12	WW891100	AM/FM TUNER	FAEH08-E02		A
△	*	YD387A00	POWER TRANSFORMER			UC
△	*	YD390A00	POWER TRANSFORMER			A
*	25	WY194300	FLEXIBLE FLAT CABLE	20P 250mm P=1.25		
*	26	WY194200	FLEXIBLE FLAT CABLE	16P 300mm P=1.25		
*	27	WY194600	FLEXIBLE FLAT CABLE	9P 100mm P=1.25		
	101	WQ665500	TOP COVER			
*	103	WW844600	REAR PANEL			U
*	103	WY417300	REAR PANEL			C
*	103	WW844700	REAR PANEL			A
*	105	WW982200	SIDE PLATE			
	107	WR946700	BARRIER	FFC		
	109	WQ664500	SUPPORT	H8		
	120	WQ379900	LEG	D60 H21		
*	121	WW981000	KNOB	D48 VOLUME		
*	122	WW981300	KNOB	D38 INPUT		
	123	WV139700	CENTER LEG	D48		
	151	WB870100	DAMPER	30x10x4		
	152	WC879000	DAMPER	SCREW MASK		
	153	WR377400	DAMPER	14x10x10		
	155	VQ368600	PUSH RIVET	P3555-B		
	160	WE774100	BIND HEAD BONDING B-T. SCREW	3x8 MFZN2B3		
	163	WE774300	BIND HEAD B-TIGHT SCREW	3x8 MFZN2W3		
	164	WE877900	BIND HEAD S-TIGHT SCREW	3x6 MFZN2W3		
	167	WF002600	PW HEAD B-TIGHT SCREW	3x8 MFZN2W3		
	168	WE774600	IC SCREW	3x18 MFZN2W3		
	170	WU048900	BIND HEAD S-TIGHT SCREW	4x10 MFZN2W3		
	171	VH313200	PW HEAD S-TIGHT SCREW	4x8-10 MFN13BL		
	172	WE200500	DISH HEAD B-TIGHT SCREW	3x6 MFN13BL		
	176	AA627310	GROUND TERMINAL			A

\* New Parts

	Ref No.	Part No.	Description		Remarks	Markets
			ACCESSORIES			
*	200	WW510800	REMOTE CONTROL	RAV436	000-213240060	U
*	200	WW510900	REMOTE CONTROL	RAV437	000-213240050	C
*	200	WW511000	REMOTE CONTROL	RAV438	000-213240070	A
	200-1	AAX82380	BATTERY COVER	Black		
	202	VQ147100	FM ANTENNA	1.4m 1pc		A
	202	V6267000	FM ANTENNA	1.4m 1pc		UC
	203	VR248500	AM ANTENNA	1.0m 1pc		
	204	WN649600	YPA0 MICROPHONE	6.0m 1pc	EM6022L-HN1700	
	205	WU187600	VIDEO AUV INPUT COVER	1pc		
△	206	WU900300	POWER CABLE	2m 1pc		UC
△	206	WB750900	POWER CABLE	2m 1pc		A
			BATTERY	R03, AAA, UM-4 2pcs		

\* New Parts

- **FRONT PANEL UNIT and SUB-CHASSIS UNIT**



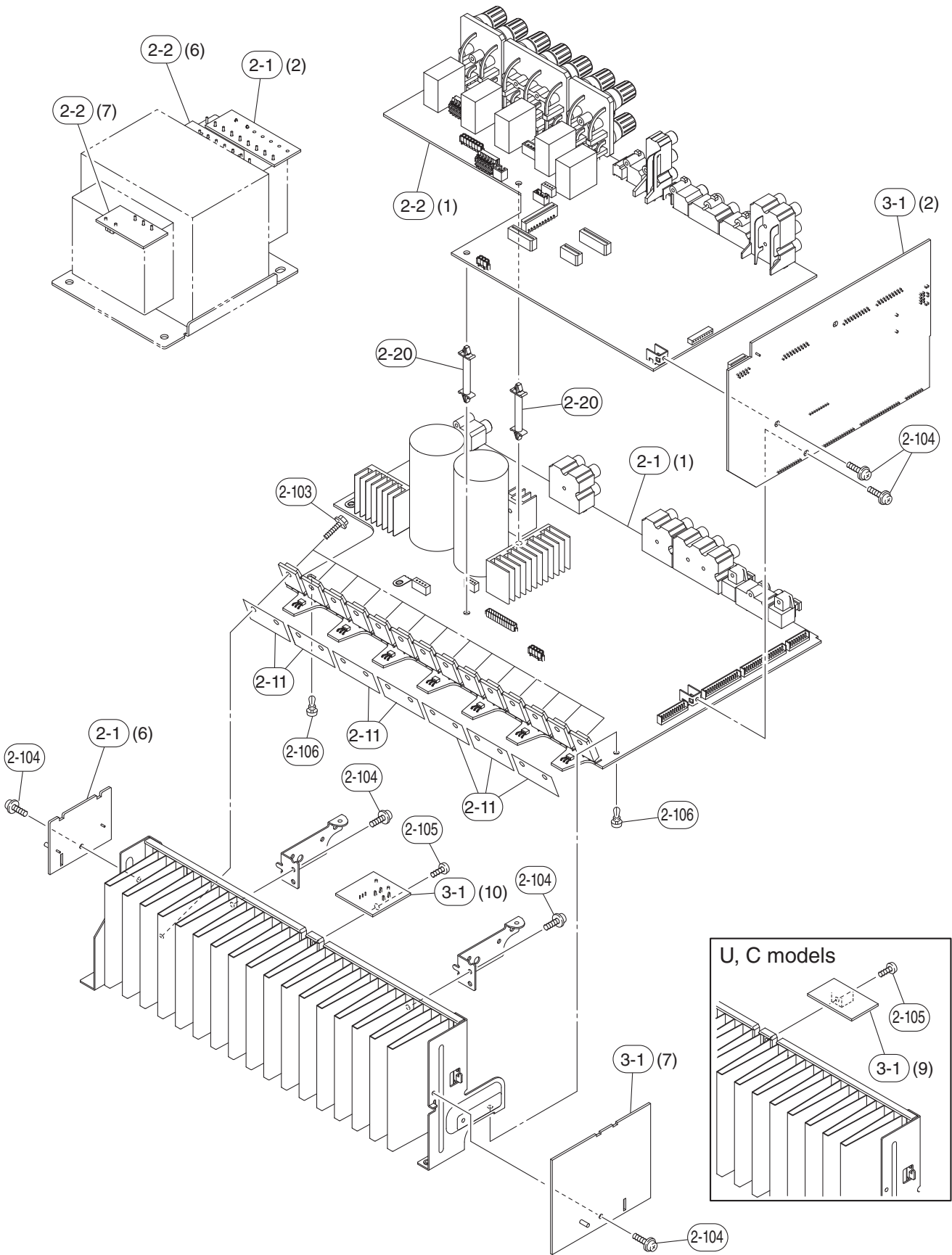
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* 1-1	WW983800	FRONT PANEL		U
* 1-1	WW988600	FRONT PANEL		CA
* 1-2	WW977200	WINDOW SHEET		U
* 1-2	WW977300	WINDOW SHEET		CA
* 1-3	WW980100	BUTTON	POWER	
* 1-4	WW980500	BUTTON	PURE DIRECT	
1-5	WU155600	LENS	PURE DIRECT	
* 1-6	WW961500	ESCUTCHEON	SCENE	
* 3-1	WY328100	P. C. B. ASSEMBLY	OPERATION	U
* 3-1	WY328300	P. C. B. ASSEMBLY	OPERATION	C
* 3-1	WY328200	P. C. B. ASSEMBLY	OPERATION	A
* 3-5	WW983000	BUTTON	TUNER	U
* 3-5	WW983400	BUTTON	TUNER	CA
* 3-6	WW961200	BUTTON	PROGRAM	
* 3-7	WW981600	ESCUTCHEON	VOLUME	
* 3-8	WW981900	ESCUTCHEON	INPUT	
* 3-9	WW983100	BUTTON	SCENE	
3-10	VQ368600	PUSH RIVET	P3555-B	
* 3-15	WY194500	FLEXIBLE FLAT CABLE	26P 300mm P=1.25	
3-16	WU741300	FLEXIBLE FLAT CABLE	9P 200mm P=1.25	
3-17	WQ083500	FLEXIBLE FLAT CABLE	20P 180mm P=1.0	
3-101	WF002600	PW HEAD B-TIGHT SCREW	3x8 MFZN2W3	
3-102	WE774800	BIND HEAD P-TIGHT SCREW	3x8 MFZN2W3	
* 5	WY331100	P. C. B. ASSEMBLY	DIGITAL	U
* 5	WY331200	P. C. B. ASSEMBLY	DIGITAL	CA

\* New Parts



RX-A710

AMP UNIT

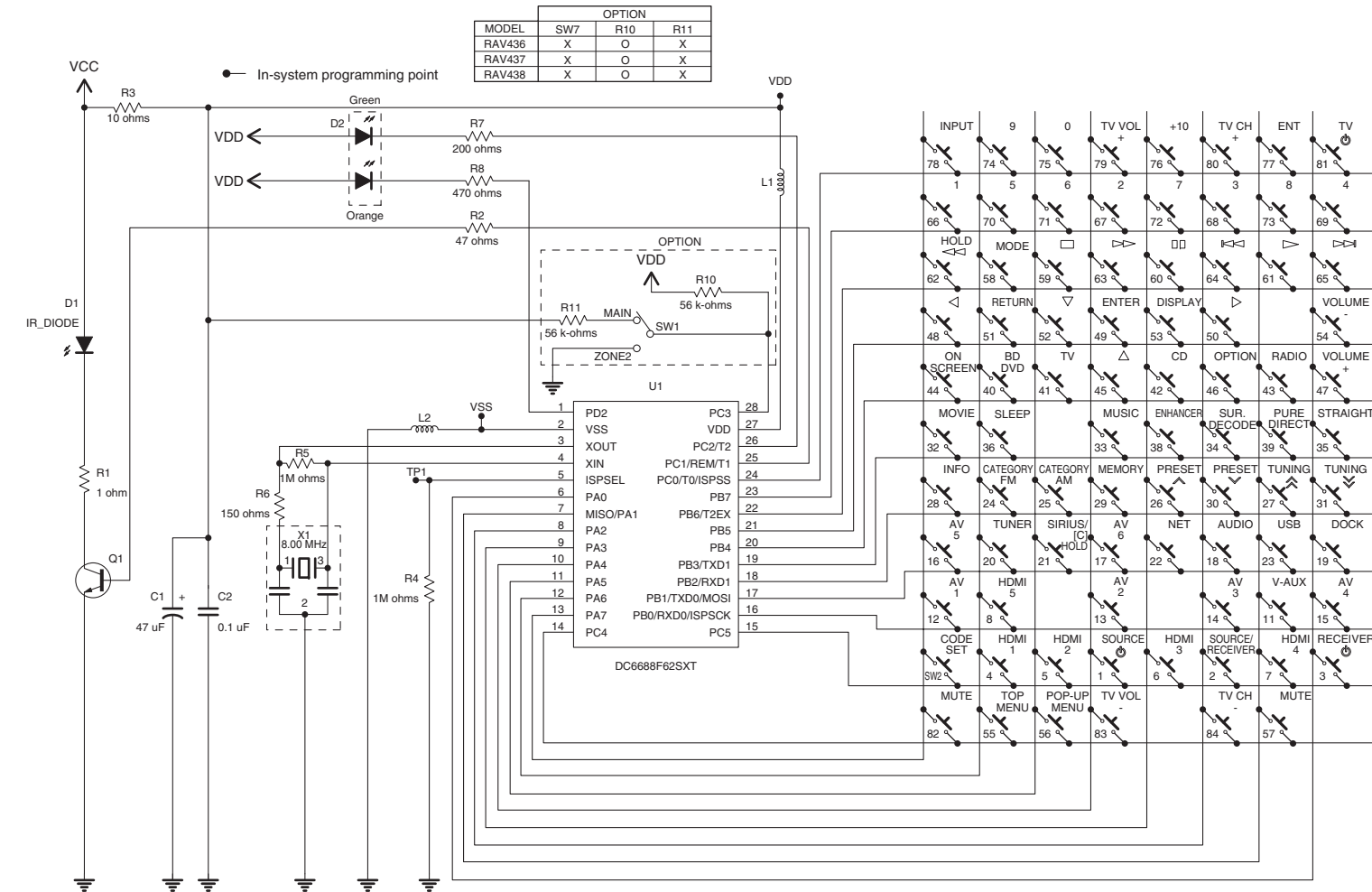


Ref No.	Part No.	Description	Remarks	Markets
* 2-1	WY332600	P. C. B. ASSEMBLY	MAIN	U C A
* 2-2	WY329700	P. C. B. ASSEMBLY	VIDEO	
* 2-2	WY330400	P. C. B. ASSEMBLY	VIDEO	
* 2-2	WY329800	P. C. B. ASSEMBLY	VIDEO	
2-11	WQ753200	RADIATION SHEET	40x23x0.06 MICA	
2-20	WS000800	SPACER SUPPORT	LCA4-29M PIN	
2-103	WM220800	HEXAGONAL HEAD B-TIGHT SCREW	3x15 SP MFZN2W3	U C A
2-104	WF002600	PW HEAD B-TIGHT SCREW	3x8 MFZN2W3	
2-105	WE774300	BIND HEAD B-TIGHT SCREW	3x8 MFZN2W3	
2-106	VQ368600	PUSH RIVET	P3555-B	
* 3-1	WY328100	P. C. B. ASSEMBLY	OPERATION	
* 3-1	WY328300	P. C. B. ASSEMBLY	OPERATION	
* 3-1	WY328200	P. C. B. ASSEMBLY	OPERATION	

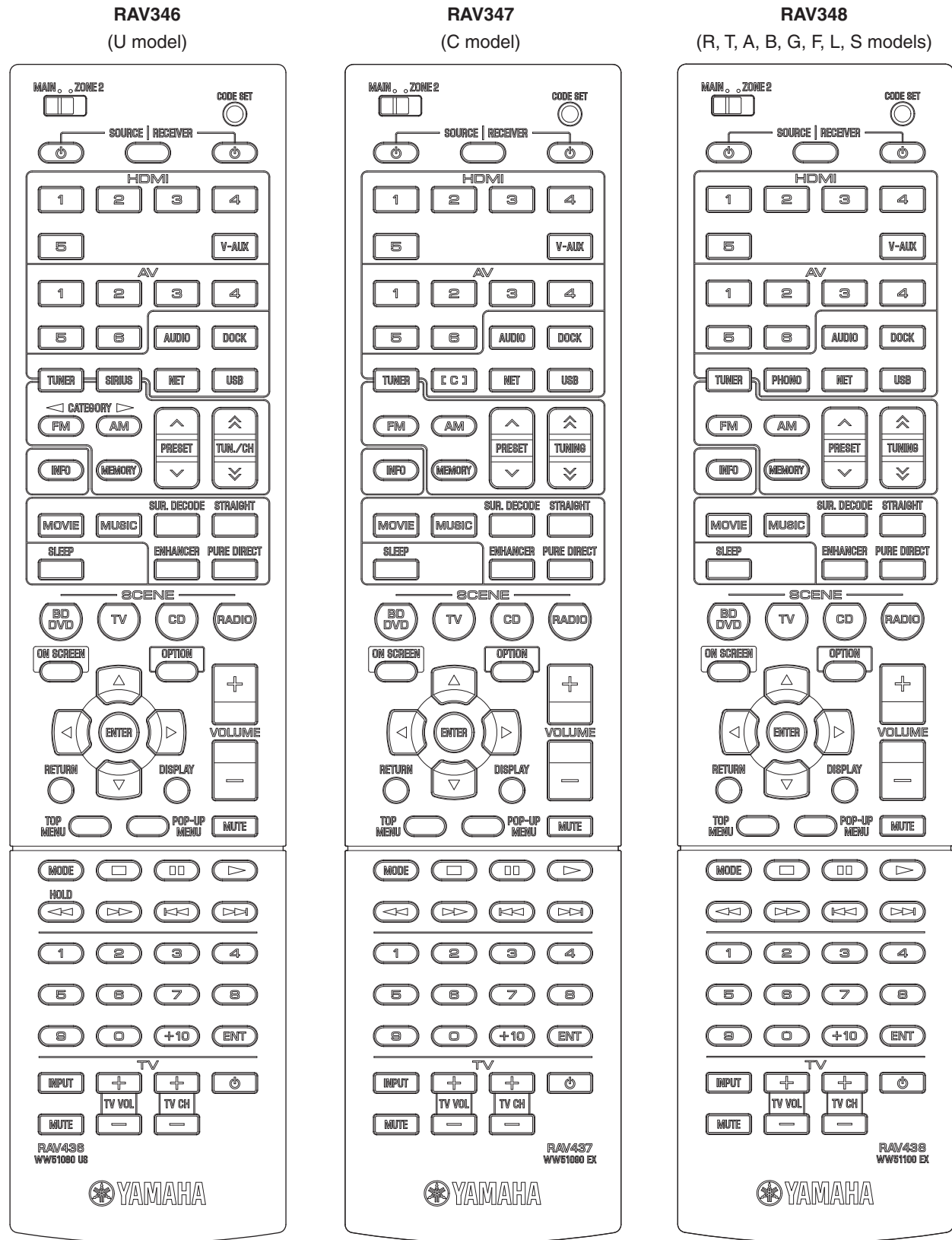
\* New Parts



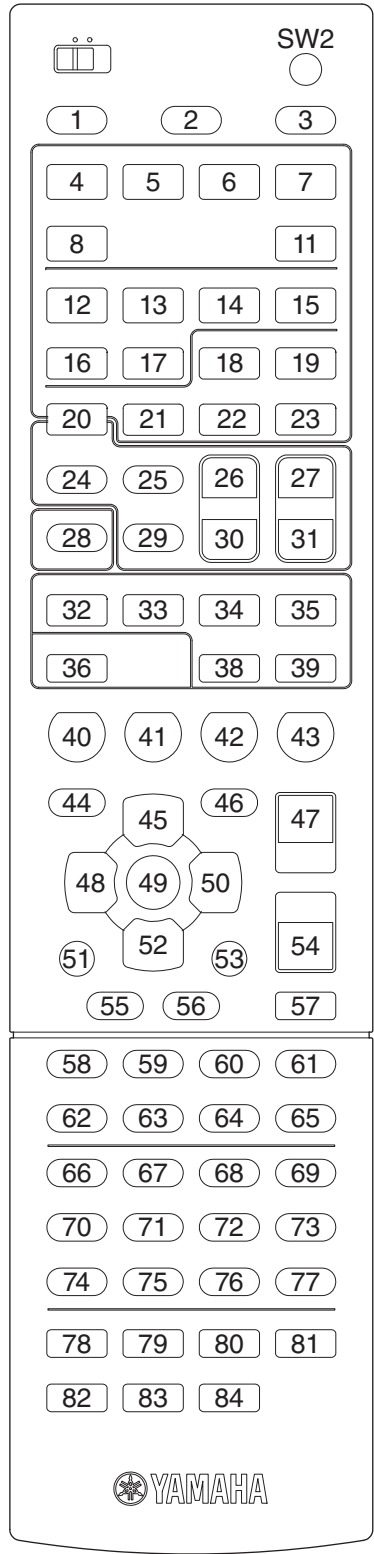
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SCHEMATIC DIAGRAM



PANELS

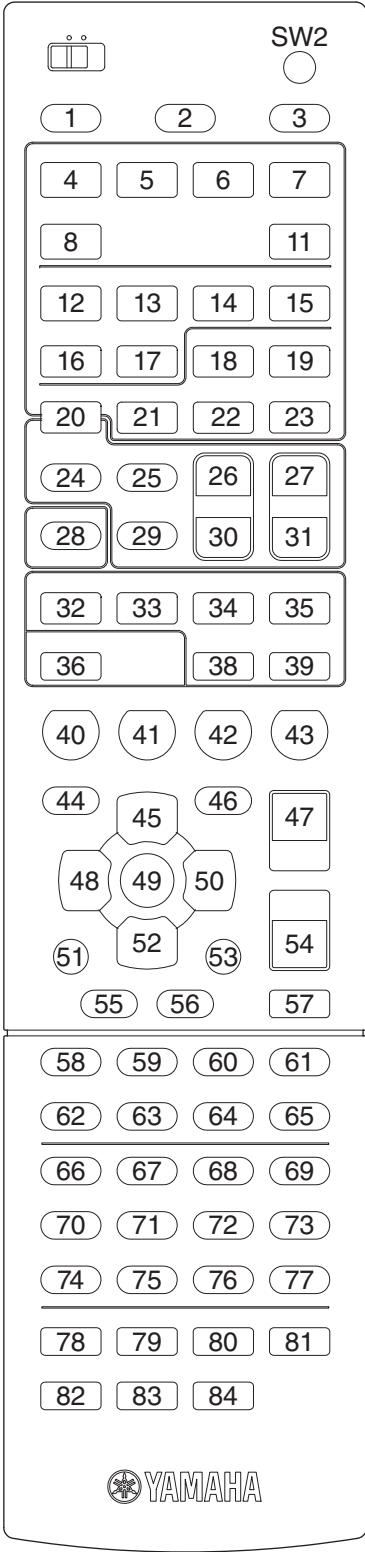


KEY NO. LAYOUT



KEY CODE  
AMP MODE

	Key No.	FUNCTION		ID-1 (5019)		ID-2 (5020)	
		RAV436 (U model)	RAV437 (C model), RAV348 (R, T, A, B, G, F, L, S models)	MAIN	ZONE2	MAIN	ZONE2
"RECEIVER" (mode fixed)	SW1	MAIN / ZONE	MAIN / ZONE	[ MAIN ]	[ ZONE2 ]	[ MAIN ]	[ ZONE2 ]
	LED1	TRANSMIT	TRANSMIT	–	–	–	–
	SW2	CODE SET	CODE SET	[ CODE SET ]	[ CODE SET ]	[ CODE SET ]	[ CODE SET ]
	K2	SOURCE / RECEIVER	SOURCE / RECEIVER	* select RCU mode "SOURCE" or "RECEIVER"			
	K3	RECEIVER	RECEIVER	7E-2A	7A-453A	7E-2AD4	7A-453B
	K4	HDMI-1	HDMI-1	7A-4738	7A-4837	7A-4739	7A-4836
	K5	HDMI-2	HDMI-2	7A-4A35	7A-4B34	7A-4A34	7A-4B35
	K6	HDMI-3	HDMI-3	7A-4D32	7A-4E31	7A-4D33	7A-4E30
	K7	HDMI-4	HDMI-4	7A-502F	7A-512E	7A-502E	7A-512F
	K8	HDMI-5	HDMI-5	7A-700F	7A-710E	7A-700E	7A-710F
	K9	HDMI-6	HDMI-6	7A-730C	7A-740B	7A-730D	7A-740A
	K10	HDMI-7	HDMI-7	7A-98E7	7A-99E6	7A-98E6	7A-99E7
	K11	V-AUX	V-AUX	7A-55	7A-D8	7A-55AB	7A-D826
	K12	AV-1	AV-1	7A-532C	7A-542B	7A-532D	7A-542A
	K13	AV-2	AV-2	7A-5629	7A-5728	7A-5628	7A-5729
	K14	AV-3	AV-3	7A-5926	7A-5A25	7A-5927	7A-5A24
	K15	AV-4	AV-4	7A-5C23	7A-5D22	7A-5C22	7A-5D23
	K16	AV-5	AV-5	7A-5F20	7A-601F	7A-5F21	7A-601E
	K17	AV-6	AV-6	7A-621D	7A-631C	7A-621C	7A-631D
	K18	AUDIO	AUDIO	7A-651A	7A-6619	7A-651B	7A-6618
	K18	AUDIO	AUDIO	7A-9BE4	7A-9CE3	7A-9BE5	7A-9CE2
	K19	DOCK	DOCK	7F01-4A	7F01-4B	7F01-4AB4	7F01-4BB5
	K20	TUNER	TUNER	7A-16	7A-D2	7A-16E8	7A-D22C
	K21	SIRIUS	[C] (C model) PHONO (R, T, A, B, G, F, L, S models)	7A-39	7A-3A	7A-39C7	7A-3AC4
	K22	NET	NET	7F01-3F	7F01-40	7F01-3FC1	7F01-40BE
	K23	USB	USB	7F01-720D	7F01-730C	7F01-720C	7F01-730D
	K24	FM / CATEGORY ( - )	FM	7F01-5827	7F01-5926	7F01-5826	7F01-5927
	K25	AM / CATEGORY ( + )	AM	7F01-552A	7F01-5629	7F01-552B	7F01-5628
	K26	PRESET	PRESET	7F01-5B24	7F01-5C23	7F01-5B25	7F01-5C22
	K27	TUNING / CH	TUNING	7F01-611E	7F01-621D	7F01-611F	7F01-621C
	K28	INFO	INFO	7A-2758	7A-2857	7A-2759	7A-2856
	K29	MEMORY	MEMORY	7F01-6718	7F01-6817	7F01-6719	7F01-6816
	K30	PRESET	PRESET	7F01-5E21	7F01-5F20	7F01-5E20	7F01-5F21
	K31	TUNING / CH	TUNING	7F01-641B	7F01-651A	7F01-641A	7F01-651B
	K32	MOVIE	MOVIE	7A-88	–	7A-8876	–
	K33	MUSIC	MUSIC	7A-89	–	7A-8977	–
	K34	SUR. DECODE	SUR. DECODE	7A-8D	–	7A-8D73	–
	K35	STRAIGHT	STRAIGHT	7A-56	–	7A-56A8	–
	K36	SLEEP	SLEEP	7A-30	7A-31	7A-30CE	7A-31CF
	K37	PARTY	PARTY	7A-34	7A-34	7A-34CA	7A-34CA
	K38	ENHANCER	ENHANCER	7A-94	–	7A-946A	–
	K39	PURE DIRECT	PURE DIRECT	7A-DD	–	7A-DD23	–
	K40	BD/DVD (SCENE)	BD/DVD (SCENE)	7A-007F	7A-017E	7A-007E	7A-017F
	K41	TV (SCENE)	TV (SCENE)	7A-037C	7A-047B	7A-037D	7A-047A
	K42	CD (SCENE)	CD (SCENE)	7A-0679	7A-0778	7A-0678	7A-0779
	K43	RADIO (SCENE)	RADIO (SCENE)	7A-0976	7A-0A75	7A-0977	7A-0A74
	K44	ON SCREEN	ON SCREEN	7A-84	–	7A-847A	–
	K46	OPTION	OPTION	7A-6B14	–	7A-6B15	–
	K47	VOLUME ( + )	VOLUME ( + )	7A-1A	7A-DA	7A-1AE4	7A-DA24
	K54	VOLUME ( - )	VOLUME ( - )	7A-1B	7A-DB	7A-1BE5	7A-DB25
	K57	MUTE	MUTE	7A-1C	7A-DC	7A-1CE2	7A-DC22




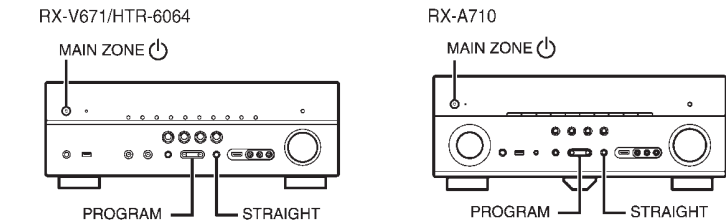
SOURCE MODE


	Key No.	FUNCTION		IR code in "RECEIVER" mode				IR code in "SOURCE" mode		K23	K22	K21	K20	K19	K18	K17	K16	K15	K14	K13	K12	K11	K8	K7	K6	K5	K4
		RAV436 (U model)	RAV437 (C model), RAV348 (R, T, A, B, G, F, L, S models)	ID-1 (5019)		ID-2 (5020)		ID-1 / ID-2	[USB]	[NET]	[SIRIUS] / PHONO or [C]	[TUNER]	[DOCK]	[AUDIO]	[AV-6]	[AV-5]	[AV-4]	[AV-3]	[AV-2]	[AV-1]	[V-AUX]	[HDMI-5]	[HDMI-4]	[HDMI-3]	[HDMI-2]	[HDMI-1]	
				MAIN	ZONE2	MAIN	ZONE2	MAIN / ZONE2																			
"SOURCE/ RCVR"	K45	△ (UP)	△ (UP)	7A-9D	7A-2B54	7A-9D63	7A-2B55	* SOURCE *	* RECEIVER *										—	* RECEIVER *							
	K48	◁ (LEFT)	◁ (LEFT)	7A-9F	7A-2D52	7A-9F61	7A-2D53												—								
	K49	ENTER	ENTER	7A-DE	7A-2F50	7A-DE20	7A-2F51												—								
	K50	▷ (RIGHT)	▷ (RIGHT)	7A-9E	7A-2E51	7A-9E60	7A-2E50												—								
	K51	RETURN	RETURN	7A-AA	7A-3C43	7A-AA54	7A-3C42												—								
	K52	▽ (DOWN)	▽ (DOWN)	7A-9C	7A-2C53	7A-9C62	7A-2C52												—								
	K53	DISPLAY	DISPLAY	7F01-60	7F01-80	7F01-609E	7F01-807E												79-0A								
	K58	MODE	MODE	7F01-66	7F01-86	7F01-6698	7F01-8678	* empty *											* empty *								
	K59	□ (STOP)	□ (STOP)	7F01-69	7F01-89	7F01-6997	7F01-8977	* SOURCE *											7A-09								
	K60	⏸ (PAUSE)	⏸ (PAUSE)	7F01-67	7F01-87	7F01-6799	7F01-8779												7A-09								
	K61	▷ (PLAY)	▷ (PLAY)	7F01-68	7F01-88	7F01-6896	7F01-8876												7A-08								
	K62	◀◀ (REW) / HOLD	◀◀ (REW)	7F01-6A	7F01-8A	7F01-6A94	7F01-8A74												7A-0D								
	K63	▶▶ (FF)	▶▶ (FF)	7F01-6B	7F01-8B	7F01-6B95	7F01-8B75												7A-0C								
	K64	⏮ (SKIP -)	⏮ (SKIP -)	7F01-6C	7F01-8C	7F01-6C92	7F01-8C72												7A-0B								
	K65	⏭ (SKIP +)	⏭ (SKIP +)	7F01-6D	7F01-8D	7F01-6D93	7F01-8D73												7A-0A								
	K66	1	1	7F01-51	7F01-71	7F01-51AF	7F01-718F	79-11																			
	K67	2	2	7F01-52	7F01-72	7F01-52AC	7F01-728C	79-12																			
	K68	3	3	7F01-53	7F01-73	7F01-53AD	7F01-738D	79-13																			
	K69	4	4	7F01-54	7F01-74	7F01-54AA	7F01-748A	79-14																			
	K70	5	5	7F01-55	7F01-75	7F01-55AB	7F01-758B	79-15																			
	K71	6	6	7F01-56	7F01-76	7F01-56A8	7F01-7688	79-16																			
	K72	7	7	7F01-57	7F01-77	7F01-57A9	7F01-7789	79-17																			
	K73	8	8	7F01-58	7F01-78	7F01-58A6	7F01-7886	79-18																			
	K74	9	9	7F01-59	7F01-79	7F01-59A7	7F01-7987	79-19																			
	K75	0	0	7F01-5A	7F01-7A	7F01-5AA4	7F01-7A84	79-10																			
	K76	+10	+10	7F01-5B	7F01-7B	7F01-5BA5	7F01-7B85	79-1A																			
	K77	ENT	ENT	7F01-5C	7F01-7C	7F01-5CA2	7F01-7C82	79-0B																			
"SOURCE" (mode fixed)	K1	⦿ SOURCE	⦿ SOURCE	* SOURCE *				* SOURCE *										79-60	* SOURCE *								
	K55	TOP MENU	TOP MENU	7A-A0DF	7A-A1DE	7A-A0DE	7A-A1DF	* SOURCE *	* RECEIVER *										—	* RECEIVER *							
				* switch RCU to "SOURCE" mode					* switch RCU to "SOURCE" mode										* switch RCU to "SOURCE" mode								
	K56	POP-UP MENU	POP-UP MENU	7A-A4DB	7A-A5DA	7A-A4DA	7A-A5DB		* RECEIVER *										—	* RECEIVER *							
				* switch RCU to "SOURCE" mode					* switch RCU to "SOURCE" mode										* switch RCU to "SOURCE" mode								
	K78	TV -INPUT	TV -INPUT	* SOURCE (TV) *				( TV -INPUT )																			
	K79	TV -VOL ( + )	TV -VOL ( + )					( TV -VOL + )																			
	K80	TV -CH ( + )	TV -CH ( + )					( TV -CH + )																			
	K81	TV - ⦿	TV - ⦿					( TV -O/I )																			
	K82	TV -MUTE	TV -MUTE					( TV -MUTE )																			
	K83	TV -VOL ( - )	TV -VOL ( - )					( TV -VOL - )																			
	K84	TV -CH ( - )	TV -CH ( - )					( TV -CH - )																			

## ■ ADVANCED SETUP

You can configure the system settings of this unit using the front display.

- 1 Set this unit to standby mode.
- 2 While holding down STRAIGHT on the font panel, press MAIN ZONE .



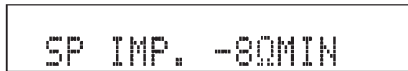
- 3 Press PROGRAM to select an item.
- 4 Press STRAIGHT to select a setting.
- 5 Press MAIN ZONE  to set this unit to standby mode and turn it on again.

The new settings become effective.

### ADVANCED SETUP menu items

Item	Function
SP IMP.	Changes the speaker impedance setting.
REMOTE ID	Selects the remote control ID of the main unit.
SR LOCK	Resets the Parental Lock code number for SIRIUS Satellite Radio. (U model)
TU	Changes the frequency step setting. (B, G, F models)
TV FORMAT	Switches the video signal type.
MON.CHK	Removes the limitation on HDMI video output.
INIT	Restores the default settings.
UPDATE	Updates the firmware.
VERSION	Checks the version of firmware currently installed on this unit.

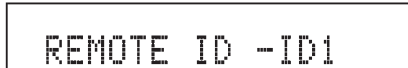
### Changing the speaker impedance setting (SP IMP.)



Change the speaker impedance settings of unit depending on the impedance of the speakers connected.

Settings	
6 Ω MIN	Select this when you connect 6-ohm speakers to this unit. You can also use 4-ohm speakers as the front speakers.
8 Ω MIN (default)	Select this when you connect 8-ohm or higher speakers to this unit.

### Selecting the remote control ID (REMOTE ID)



Select the remote control ID of the main unit so that it matches to the ID of the remote control (default: ID1). When using multiple Yamaha AV receivers, you can set each remote control with a unique remote control ID for its corresponding receiver.

Settings
ID1 (default). ID2

### ■ Changing the remote control ID of the remote control

Perform each of the following steps within 1 minute. Otherwise, the setting will be automatically canceled.

- 1 Press CODE SET on the remote control using a pointed object such as the tip of a ballpoint pen.
- 2 Press SOURCE/RECEIVER.
- 3 Use the numeric keys to enter “5019” (ID1) or “5020” (ID2).

Once the remote control ID is registered successfully, SOURCE/RECEIVER blinks twice. If it blinks 6 times, registration failed. Repeat from step 1.



- The registered remote control codes (p.104) are not cleared even if you change the remote control ID.

### Resetting the Parental Lock code number (SR LOCK)

(U model)



Reset the Parental Lock code number for SIRIUS Satellite Radio.

Choices	
RESET	Resets the Parental Lock code number.
CANCEL	Does not perform a reset.

### Changing the frequency step setting (TU)

(B, G, F models)



Change the frequency step setting of this unit depending on your listening environment.

Settings	
FM100/AM10	Select this when you want to adjust the FM frequency by 100-kHz steps and AM by 10-kHz steps.
FM50/AM9 (default)	Select this when you want to adjust the FM frequency by 50-kHz steps and AM by 9-kHz steps.

### Switching the video signal type (TV FORMAT)



Switch the video signal type of this unit so that it matches to the format of your TV.

Settings
NTSC (default), PAL

### Removing the limitation on HDMI video output (MON.CHK)



This unit automatically detects resolutions supported by a TV connected to the HDMI OUT jacks.

If you want to select a resolution in “Resolution” regardless of the detection results or if this unit does not detect it correctly, disable the monitor check function.

Settings	
YES (default)	Enables the monitor check function. (Outputs video signals with a resolution supported by the TV only.)
SKIP	Disables the monitor check function. (Outputs video signals with a specified resolution regardless of compatibility with the TV.)



- In case this unit becomes inoperable because videos from this unit cannot be displayed on the TV after “MON.CHK” is set to “SKIP”, reset the setting to “YES”.

### Restoring the default settings (INIT)



Restores the default settings for the selected item.

Choices	
VIDEO	Restores the default settings for video configurations.
ALL	Restores the default settings for this unit.
CANCEL	Does not perform an initialization.

Updating the firmware (UPDATE)

New firmware will be released irregularly for the purpose of additional features or product improvements. It can be downloaded from our website. If this unit is connected to the Internet, you can download the firmware via the network. For details, refer to the information supplied with updates.



Firmware update procedure

Do not perform this procedure unless firmware update is necessary. Also, make sure you read the information supplied with updates before updating the firmware.

- 1 Press STRAIGHT repeatedly to select “USB” or “NETWORK” and press INFO to start firmware update.

Choices	
USB	Update the firmware using a USB memory device.
NETWORK	Update the firmware via the network.



- If this unit detects a newer firmware over the network, the corresponding message will be displayed after ON SCREEN is pressed. In this case, you can also update the firmware of this unit by following the procedure in “Updating the firmware of this unit” .

Checking the firmware version (VERSION)

Check the version of firmware currently installed on this unit.



- You can also check the firmware version in “System” in the “Information” menu.

RX-V671/HTR-6064/  
RX-A710

